Friday, January 08, 2010

REQUEST NUMBER: 10-1161

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-1161
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 1/8/2010
TURNAROUND/REPORT DUE: 2/7/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	

Friday, January 08, 2010

REQUEST NUMBER: 10-1161

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	
		1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	
		1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
		1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	
	SW-846:6850	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	

Friday, January 08, 2010

REQUEST NUMBER: 10-1161

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6850	1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	
		1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
		1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	
	SW-846:7470A	1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	
	SW-846:7471A	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	
		1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	

Friday, January 08, 2010

REQUEST NUMBER: 10-1161

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
	SW-846:9012A	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	
		1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	
		1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
		1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	

Friday, January 08, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1161

REQUEST NUMBER: 10-1161

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 2/7/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7738	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7738	1	POLY	SW-846:6850	Ice	W
RE12-10-7738	1	POLY	TCN	Sodium Hydroxide	W
RE12-10-7737	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7737	1	POLY	SW-846:6850	Ice	W
RE12-10-7737	1	POLY	TCN	Sodium Hydroxide	W
RE12-10-7734	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7701	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7702	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7700	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7699	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7727	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7710	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7715	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7707	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7719	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7717	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7708	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7706	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7714	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7705	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7709	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7711	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7712	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7716	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7718	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7713	1	POLY	Met+U+CLO4+CN	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
		1/4/10	3:00				
Printed Name	Signature			Printed Name	Signature		

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7699 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		0957	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610667	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Yes	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY 7am 1/6/10	None	Yes	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Yes	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Dark brown moist sandy silt, some clay few roots, some rocks

SAMPLE COMMENTS:

NA

LOCATION DESC: 1a-15 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤27 dpm

BY ≤2480 dpm

PID amient reading 0.0 / 0.0 ppm

HE NEG

COLLECTED BY (PRINT) R Saunders **REVIEWED BY (PRINT)** TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders (Signature) R. Saunders	01/06/2010 1555	(Printed Name) S. MARTAU (Signature)	1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7700 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	OBT3	ok
TIME COLLECTED (HH:MM)		1012	SUB-MEDIA:	TUFF I	↓
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610667		FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC		FIELD PREP:	NA	
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.0	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	ok	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: N/A COMPOSITE TIME INTERVAL: N/A WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: N/A BOREHOLE DIRECTION: N/A

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	NORMAL	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Yes	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY 13m 1/6/10	None	Yes	
1		Met+U+CLO4+CN	1 ~~GAL~~ POLY 1 Liter	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Pinkish gray weathered tuff, some clay

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-15 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 11 dpm

BY ≤ 2750 dpm

PID Ambient reading 0.0 / 0.0 ppm

HE NEG

COLLECTED BY (PRINT) Nick Gallegos

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R Saunders	01/06/2010	(Printed Name) S. MADRAN	1/6/10
(Signature) R. Saunders	1555	(Signature)	1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7701 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	OBT3	Alh
TIME COLLECTED (HH:MM)		1259	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610668	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) NA

BOREHOLE: YES (NO) NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY 1gn 1/6/10	None	Y	
1		Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Wet brown silty sand

FD RE12-10-7727

SAMPLE COMMENTS: Drainage

LOCATION DESC: 1a-19

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 11 dpm PID ambient reading 0.0 / 0.0 ppm

βγ ≤ 2459 dpm HE NEG

COLLECTED BY (PRINT) TL McFarland **REVIEWED BY (PRINT)** R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland (Signature) Tracy McFarland	01/06/2010 1555	(Printed Name) S MARIZAK (Signature)	1/6/10 1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7702 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	ok
TIME COLLECTED (HH:MM)		1320	SUB-MEDIA:	TUFF 1	↓
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610668	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1.9	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	ok	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY 7am 1/6/10	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown moist weathered tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-19, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 11 dpm PID ambient reading 0.0 / 0.0 ppm

βγ ≤ 2770 dpm

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland (Signature) Tracy McFarland	01/06/2010 1555	(Printed Name) S. MARCIAK (Signature)	1/6/10 1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7705 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	OBT3	Alh
TIME COLLECTED (HH:MM)		932	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610670	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.7	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY 72h 1/6/10	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sandy silt, moist, some clay and pinkish gray tuff

SAMPLE COMMENTS:

Hit tuff at 0.5 ft

LOCATION DESC: 1a-14, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 38 dpm
Beta/Gamma ≤ 2100 dpm

PID Ambient/Reading 0.0/0.0 ppm

HE negative

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland (Signature) Tracy McFarland	01/06/2010 1555	(Printed Name) S. MARCRAM (Signature)	1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7706 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	OK
TIME COLLECTED (HH:MM)		945	SUB-MEDIA:	TUFF 1	OK
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610670	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.0	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	R	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 1/6/2010	None	Y	
1	↓	Met+U+CLO4+C N	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Pinkish - Gray, Weathered tuff, some clay

FR RE12-10-7738

SAMPLE COMMENTS: In Oak Brush Area

LOCATION DESC: 1a-14, South of Road

FIELD SCREENING/MEASUREMENT RESULTS:

PID Ambient 0.0 / ~~Reading~~ 0.0 **ppm**

Alpha ≤ 22 dpm
Beta/Gamma ≤ 2390 dpm

COLLECTED BY (PRINT) Larry A. Lopez

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland (Signature) Tracy McFarland	01/06/2010 1555	(Printed Name) S. MARCRAY (Signature)	1/6/10 1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7707 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	Allh
TIME COLLECTED (HH:MM)		1029	SUB-MEDIA:	TUFF 1	Na
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610671	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.3	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY TJM 1/6/2010	None	Y	
1	↓	Met+U+CLO4+C N	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown loamy silty sand, roots and rocks

SAMPLE COMMENTS: small sediment pocket in drainage

LOCATION DESC: 1a-16 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 33 dpm
Beta/Gamma ≤ 2460 dpm

PID Ambient 0.0 / Reading 0.0 ppm
HE neg

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	01/06/2010	(Printed Name) S. MARCZAK	1/6/10
(Signature) [signature]	1555	(Signature) [signature]	1555
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7708 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	OBT3	ok
TIME COLLECTED (HH:MM)		1049	SUB-MEDIA:	TUFF 1	↓
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610671	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	TJM 1/06/10 ~~1.8~~ 2.0	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	ok	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY TJM 1/6/10	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Pinkish gray Tuff

SAMPLE COMMENTS: Tuff at 0.5 ft

LOCATION DESC: 1a-16 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 44 dpm
Beta/Gamma ≤ 2790 dpm

PID Ambient 0.0 / Reading 0.0 ppm

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	~~1101~~ TJM 1/6/10 01/06/2010 1555	(Printed Name) S. MARCIAN	1/6/10 1555
(Signature)		(Signature)	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7709 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		1108	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610672	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.8	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY 13m 1/06/10	None	Yes	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown silty sand, some rocks, some roots

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-17 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 27 dpm
Beta/Gamma ≤ 3060 dpm

PID Ambient Reading 0.0 / 0.0 ppm

COLLECTED BY (PRINT) R Saunders REVIEWED BY (PRINT) TL McFarlana

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TL McFarlana (Signature) [signature]	01/06/2010 1555	(Printed Name) S. MARCZAK (Signature) [signature]	1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7710 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	OK
TIME COLLECTED (HH:MM)		1118	SUB-MEDIA:	TUFF 1	OK
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610672	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.8	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	R	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY TZM 1/06/10	None	Yes	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: pinkish grey tuff

FD RE12-10-7734

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-17 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 44 dpm
Beta/Gamma ≤ 2930 dpm

PID Ambient 0.0 / Reading 0.0 ppm

COLLECTED BY (PRINT) Nickolas Gallegos

REVIEWED BY (PRINT) TL McFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	01/06/2010	(Printed Name) S. MARCZAK	1/6/10
(Signature) [signature]	1555	(Signature) [signature]	1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7711 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	Alluh
TIME COLLECTED (HH:MM)		1137	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610673	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.9	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 13m 1/06/2010	None	Y	
1	↓	Met+U+CLO4+C N	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: brown sandy silt, slightly moist, rocks, few roots

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-18, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE neg

Alpha ≤ 22 dpm
Beta/Gamma ≤ 2550 dpm

PID Ambient 0.0 / Reading 0.0 ppm

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland	01/06/2010	(Printed Name) S. MARCZAK	1/6/10
(Signature) Tracy McFarland	1555	(Signature)	1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7712 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	OK
TIME COLLECTED (HH:MM)		1147	SUB-MEDIA:	TUFF 1	OK
PRS ID:	12-001(a)-99	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610673	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1.9	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	OK	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY 13m 1/06/2010	None	Yes	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brownish grey weathered tuff, slightly moist

SAMPLE COMMENTS:

hit tuff at 1.5 ft

LOCATION DESC: 1a-18, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 27 **dpm**
Beta/Gamma ≤ 2107D **dpm**

PID ~~Ambient Reading~~ 0.0 / 0.0 ppm

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) TLMcFarland (Signature) Tracy McFarland	01/06/2010 1555	(Printed Name) S. MARCRAY (Signature) [illegible]	1/6/10 1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7713 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	OBT3	ALLH
TIME COLLECTED (HH:MM)		1303	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610674	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.10	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	~~S~~	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) / NA

BOREHOLE: YES / (NO) / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISOPU+ISOU	1 LITER POLY 13m 1/6/10	None	Yes	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: silty-Brown with some root fragments - loose soil sand

SAMPLE COMMENTS:
DRAINAGE AREA

LOCATION DESC: 1a-20 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 33 dpm
Beta/Gamma = 2210 dpm

PID Ambient Reading 0.0 / 0.0 ppm
HE negative

COLLECTED BY (PRINT) R Saunders **REVIEWED BY (PRINT)** Larry A. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Larry A Lopez	01/06/10	(Printed Name) S. MARCIAN	1/6/10
(Signature) Larry A Lopez	1555	(Signature) [signature]	1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7714 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	ALLH
TIME COLLECTED (HH:MM)		1315	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610674	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.0	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 1/6/10	None	Yes	
1	↓	Met+U+CLO4+C N	~~1 GAL~~ POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Light brown with root fragments silty sand 12m 01/06/10

SAMPLE COMMENTS: Dranage area / 01-06-10 PRS location

LOCATION DESC: 1a-20 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 44 dpm
Beta/Gamma ≤ 2640 dpm

PID ~~Ambient Reading~~ 0.0 ppm

COLLECTED BY (PRINT) Larry A. Lopez

REVIEWED BY (PRINT) R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Larry A Lopez	01/06/10	(Printed Name) S. MALONEY	1/6/10
(Signature) Larry A Lopez	1555	(Signature)	1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7715 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	OBT3	ALLH
TIME COLLECTED (HH:MM)		1331	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610675	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.6	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / (NO) NA

BOREHOLE: YES / (NO) NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISOPU+ISOU	1 LITER POLY TZM 1/6/10	None	Yes	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY / Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Dark brown, sandy silt TZM 1/6/10 moist, soil - rocks - roots

SAMPLE COMMENTS: N/A

LOCATION DESC: 1a-21 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 33 dpm
Beta/Gamma ≤ 2220 dpm

PID Ambient 0.0 / Reading 0.0 ppm
HE NEG

COLLECTED BY (PRINT) R. Saunders **REVIEWED BY (PRINT)** TL McFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders (Signature) R. Saunders	01/06/2010 1555	(Printed Name) G. MARTIN (Signature)	1/6/10 1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7716 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	ALL H
TIME COLLECTED (HH:MM)		1350	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610675	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISO PU+ISOU	1 LITER POLY 1am 1/6/10	None	Yes	
1	↓	Met+U+CLO4+C N	~~1 GAL~~ POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown silty sand, few roots, some rock

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-21 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 16 **dpm**
Beta/Gamma ≤ 2460 **dpm**

PID ambient reading 0.0 / 0.0 ppm

COLLECTED BY (PRINT) R Saunders **REVIEWED BY (PRINT)** TL McFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders	01/06/2010	(Printed Name) S. MARCLAY	1/6/10
(Signature) R. Saunders	1555	(Signature) [illegible]	1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7717 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	Alluv
TIME COLLECTED (HH:MM)		1344	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610676	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.3	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY 1pm 1/6/10	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Wet sand

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-22, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 22 dpm

BY ≤ 2430 dpm

PID ambient 0.0 / reading 0.0 ppm

HE neg

COLLECTED BY (PRINT) TL McFarlane **REVIEWED BY (PRINT)** R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders	01/06/2010	(Printed Name) S. MARIZAY	1/6/10
(Signature) R. Saunders	1555	(Signature) [signature]	1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7718 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	ok
TIME COLLECTED (HH:MM)		1411	SUB-MEDIA:	TUFF 1	↓
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	12-610676	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	ok	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISOPU+ISOU	1 LITER POLY TJM 1/6/10	None	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brownish gray tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-22, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 11 dpm PID ambient reading 0.0 / 0.0 ppm

Bγ ≤ 3110 dpm

COLLECTED BY (PRINT) TL McFarland **REVIEWED BY (PRINT)** R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders (Signature) R. Saunders	01/06/2010 1555	(Printed Name) S. MARCRAN (Signature) [illegible]	1/6/10 1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7719 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	OBT3	ALLH
TIME COLLECTED (HH:MM)		1431	SUB-MEDIA:	TUFF 1	RS 01-06-10 ~~0~~ NA
PRS ID:	12-001(a)-99	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610677	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	RS 01-06-10 ~~0.5~~ 0.7	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / (NO) / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / (NO) / NA

BOREHOLE: YES / (NO) / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISOPU+ISOU	1 LITER POLY YJM 1/6/10	None	Yes	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1 Liter	Ice	Yes	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: dark brown wet silty sand, some roots

FR RE12-10-7737

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-23, drainage

FIELD SCREENING/MEASUREMENT RESULTS: HE negative

α ≤ 27 dpm PID ambient reading 0.0 / 0.0 ppm

BY ≤ 2230dpm

COLLECTED BY (PRINT) R Saunders **REVIEWED BY (PRINT)** TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders (Signature) R. Saunders	01/06/2010 1555	(Printed Name) S. MARCZAK (Signature) [signature]	1/6/10 1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7727 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	QBT3	Alln
TIME COLLECTED (HH:MM)		1259	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	UNK	12-610668	FIELD QC TYPE:	NA	FD
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	ok
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	QC
BOTTOM DEPTH:	0	1.0	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISOPU+ISOU	1 LITER POLY 12m 1/6/10	None	Y	
1		Met+U+CLO4+CN	1 ~~GAL~~ POLY 1L	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC sample of RE12-10-7701
Wet brown silty sand

SAMPLE COMMENTS:
NA

LOCATION DESC: 1a-19, drainage

FIELD SCREENING/MEASUREMENT RESULTS:
α ≤ 11 dpm
βγ ≤ 2450 dpm
PID ambient 0.0 / reading 0.0
HE neg

COLLECTED BY (PRINT) TL McFarland **REVIEWED BY (PRINT)** R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders (Signature) R. Saunders	01/06/2010 1555	(Printed Name) S. MARTAU (Signature)	1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7734 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	OBT3	ok
TIME COLLECTED (HH:MM)		1118	SUB-MEDIA:	TUFF 1	
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	HA	
LOCATION ID:	UNK	12-610672	FIELD QC TYPE:	FD	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0	1.0	SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0	2.8	SCREEN/PORT DESC:		NA
FIELD MATRIX:	B	ok	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
		12m 1/6/2010				
1	Normal	~~8082+~~NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 1/6/10	None	Y	
1		Met+U+CLO4+CN	1 ~~GAL~~ POLY 1 Liter	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE12-10-7710

Pinkish gray tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 1a-17, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

α ≤ 44 dpm PID ambient reading 0.0 / 0.0

BY ≤ 2930 dpm

COLLECTED BY (PRINT) Nickolas Gallegos **REVIEWED BY (PRINT)** TL McFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders	01/06/2010	(Printed Name) S. MARCZAK	1/6/10
(Signature) R. Saunders	1555	(Signature)	1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7737 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1507	SUB-MEDIA:	OTHER	
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	12-610677	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W	W	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA **COMPOSITE TIME INTERVAL:** NA **WATER FLOWING:** YES / NO / NA

BOREHOLE: YES / NO / NA **BOREHOLE DECLINATION:** NA **BOREHOLE DIRECTION:** NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	METALS+U-GEL	1 LITER POLY	Nitric Acid	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE12-10-7719

SAMPLE COMMENTS: Rinsate

LOCATION DESC: 1a-23

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT) TL McFarland **REVIEWED BY (PRINT)** R Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders (Signature) R. Saunders	01/06/2010 1555	(Printed Name) S. MAHRAM (Signature)	1/6/10 1555
RELINQUISHED BY (Printed Name) (Signature)	**Date/Time**	**RECEIVED BY** (Printed Name) (Signature)	**Date/Time**

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2493 **EVENT NAME:** 4th Qtr. FY09 - CU 12-001(a)-99 - Threemile Canyon

SAMPLE ID: RE12-10-7738 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/06/2010	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1000	SUB-MEDIA:	OTHER	
PRS ID:	12-001(a)-99	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	12-610670	FIELD QC TYPE:	FR	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W	W	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: NA COMPOSITE TIME INTERVAL: NA WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: NA BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	METALS+U-GEL	1 LITER POLY	Nitric Acid	Y	
1		SW-846:6850	250 ML POLY	Ice	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE12-10-7706

SAMPLE COMMENTS: Rinsate

LOCATION DESC:
la-14

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders	01/06/2010	(Printed Name) S. MARTIN	1/6/10
(Signature) R. Saunders	1555	(Signature)	1555
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-1161 VALIDATION DATE: 2/17/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☒ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The MS/MSD %R calculations were performed incorrectly. The aqueous and soil parent sample results were < the MDL and, thus, a result of 0 µg/kg or 0 µg/L should have been used to calculate the %Rs. The laboratory subtracted the parent sample concentration. The %Rs were within the acceptance limits when calculated correctly. No sample results were qualified as a result.

Reviewed by: Charissa Lewis Level: 1 Date: 2/18/10

VALIDATOR'S SIGNATURE: DATE: 2/17/10

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

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Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The Internal Standard (IS) relativer retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
☐	☒	☐	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
☐	☐	☒	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
☐	☐	☒	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
☐	☐	☒	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
☐	☐	☒	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PREC1d	R, PERC1d
☐	☒	☐	7. The sample result is ≤ 5X the concentration of the related analyte in the method blank.	U, PERC4	N/A
☐	☒	☐	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J+, PERC4a
☐	☒	☐	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
☐	☒	☐	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
☐	☒	☐	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
☐	☒	☐	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99.	UJ, R, PERC7a	J, PERC7a

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
☐	☒	☐	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, PERC7f	R. PERC7f
☐	☒	☐	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
☐	☒	☐	17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	N/A	R, PERC8a
☐	☒	☐	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
☐	☒	☐	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
☐	☒	☐	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
☐	☒	☐	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
☐	☒	☐	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
☐	☒	☐	23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC12c	R, PERC12c
☐	☒	☐	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
☐	☒	☐	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
☐	☒	☐	26. The MS/MSD percent recovery was >125%.	N/A	J+, PERC12f

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2

LC/MS/MS Perchlorate Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
☐	☐	☒	28. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, PERC15	N/A
☐	☐	☒	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
☐	☐	☒	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
☐	☐	☒	31. The Interference Check Sample was not within ±20% of the known value.	UJ, PERC16a	J, PERC16a
☐	☐	☒	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
☐	☒	☐	33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, PERC19	J, R, PERC19
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 940153

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7738

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161

GEL Sample ID: 244226001

Date Filtered: 13-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:15	per0118015a
	Perchlorate Isotope Ratio						1	18-JAN-10 19:15	per0118015a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:15	per0118015a
	Perchlorate-O(18)			0.490	ug/L		1	18-JAN-10 19:15	per0118015a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

LMF
2/17/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 940153

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7737

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161

GEL Sample ID: 244226002

Date Filtered: 13-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:41	per0118018a
	Perchlorate Isotope Ratio						1	18-JAN-10 19:41	per0118018a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:41	per0118018a
	Perchlorate-O(18)			0.487	ug/L		1	18-JAN-10 19:41	per0118018a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

LMF
2/17/10

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7734

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227001

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.5

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.535	2.14	0.535	ug/kg	U	1	16-JAN-10 03:34	per0115068a
	Perchlorate Isotope Ratio						1	16-JAN-10 03:34	per0115068a
14797-73-0	Perchlorate-101	.535	2.14	0.535	ug/kg	U	1	16-JAN-10 03:34	per0115068a
	Perchlorate-O(18)			4.82	ug/kg		1	16-JAN-10 03:34	per0115068a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7701

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227002

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.672	2.69	0.672	ug/kg	U	1	16-JAN-10 04:03	per0115071a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:03	per0115071a
14797-73-0	Perchlorate-101	.672	2.69	0.672	ug/kg	U	1	16-JAN-10 04:03	per0115071a
	Perchlorate-O(18)			6.19	ug/kg		1	16-JAN-10 04:03	per0115071a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7702

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227003

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.588	2.35	0.588	ug/kg	U	1	16-JAN-10 04:13	per0115072a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:13	per0115072a
14797-73-0	Perchlorate-101	.588	2.35	0.588	ug/kg	U	1	16-JAN-10 04:13	per0115072a
	Perchlorate-O(18)			5.50	ug/kg		1	16-JAN-10 04:13	per0115072a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7700

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227004

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.7

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 04:22	per0115073a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:22	per0115073a
14797-73-0	Perchlorate-101	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 04:22	per0115073a
	Perchlorate-O(18)			5.49	ug/kg		1	16-JAN-10 04:22	per0115073a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7699

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227005

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 80

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.628	2.51	0.710	ug/kg	J	1	16-JAN-10 04:32	per0115074a
	Perchlorate Isotope Ratio			3.42			1	16-JAN-10 04:32	per0115074a
14797-73-0	Perchlorate-101	.628	2.51	0.641	ug/kg	J	1	16-JAN-10 04:32	per0115074a
	Perchlorate-O(18)			6.20	ug/kg		1	16-JAN-10 04:32	per0115074a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7727

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227006

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.669	2.68	0.669	ug/kg	U	1	16-JAN-10 04:41	per0115075a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:41	per0115075a
14797-73-0	Perchlorate-101	.669	2.68	0.669	ug/kg	U	1	16-JAN-10 04:41	per0115075a
	Perchlorate-O(18)			6.38	ug/kg		1	16-JAN-10 04:41	per0115075a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7710

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227007

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 05:20	per0115079a
	Perchlorate Isotope Ratio						1	16-JAN-10 05:20	per0115079a
14797-73-0	Perchlorate-101	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 05:20	per0115079a
	Perchlorate-O(18)			5.10	ug/kg		1	16-JAN-10 05:20	per0115079a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7715

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227008

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	2.09	ug/kg	J	1	16-JAN-10 05:29	per0115080a
	Perchlorate Isotope Ratio			3.06			1	16-JAN-10 05:29	per0115080a
14797-73-0	Perchlorate-101	.675	2.7	2.12	ug/kg	J	1	16-JAN-10 05:29	per0115080a
	Perchlorate-O(18)			6.67	ug/kg		1	16-JAN-10 05:29	per0115080a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7707

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227009

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 79

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.636	2.54	0.636	ug/kg	U	1	16-JAN-10 05:39	per0115081a
	Perchlorate Isotope Ratio						1	16-JAN-10 05:39	per0115081a
14797-73-0	Perchlorate-101	.636	2.54	0.636	ug/kg	U	1	16-JAN-10 05:39	per0115081a
	Perchlorate-O(18)			6.03	ug/kg		1	16-JAN-10 05:39	per0115081a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7719

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227010

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.6	2.4	0.621	ug/kg	J	1	16-JAN-10 05:48	per0115082a
	Perchlorate Isotope Ratio			2.85			1	16-JAN-10 05:48	per0115082a
14797-73-0	Perchlorate-101	.6	2.4	0.674	ug/kg	J	1	16-JAN-10 05:48	per0115082a
	Perchlorate-O(18)			6.21	ug/kg		1	16-JAN-10 05:48	per0115082a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7717

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227011

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.612	2.45	0.612	ug/kg	U	1	16-JAN-10 05:58	per0115083a
	Perchlorate Isotope Ratio						1	16-JAN-10 05:58	per0115083a
14797-73-0	Perchlorate-101	.612	2.45	0.612	ug/kg	U	1	16-JAN-10 05:58	per0115083a
	Perchlorate-O(18)			5.51	ug/kg		1	16-JAN-10 05:58	per0115083a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7708

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227012

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 96.8

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.517	2.07	0.517	ug/kg	U	1	16-JAN-10 06:07	per0115084a
	Perchlorate Isotope Ratio						1	16-JAN-10 06:07	per0115084a
14797-73-0	Perchlorate-101	.517	2.07	0.517	ug/kg	U	1	16-JAN-10 06:07	per0115084a
	Perchlorate-O(18)			4.88	ug/kg		1	16-JAN-10 06:07	per0115084a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7706

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227013

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	0.557	ug/kg	U	1	16-JAN-10 06:17	per0115085a
	Perchlorate Isotope Ratio						1	16-JAN-10 06:17	per0115085a
14797-73-0	Perchlorate-101	.557	2.23	0.557	ug/kg	U	1	16-JAN-10 06:17	per0115085a
	Perchlorate-O(18)			5.67	ug/kg		1	16-JAN-10 06:17	per0115085a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7714

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227014

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 90.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.612	ug/kg	J	1	16-JAN-10 06:26	per0115086a
	Perchlorate Isotope Ratio			3.14			1	16-JAN-10 06:26	per0115086a
14797-73-0	Perchlorate-101	.553	2.21	0.601	ug/kg	J	1	16-JAN-10 06:26	per0115086a
	Perchlorate-O(18)			5.29	ug/kg		1	16-JAN-10 06:26	per0115086a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7705

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227015

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.597	2.39	0.597	ug/kg	U	1	16-JAN-10 06:36	per0115087a
	Perchlorate Isotope Ratio						1	16-JAN-10 06:36	per0115087a
14797-73-0	Perchlorate-101	.597	2.39	0.597	ug/kg	U	1	16-JAN-10 06:36	per0115087a
	Perchlorate-O(18)			5.66	ug/kg		1	16-JAN-10 06:36	per0115087a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7709

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228001

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.593	2.37	0.593	ug/kg	U	1	14-JAN-10 19:39	per0114046a
	Perchlorate Isotope Ratio						1	14-JAN-10 19:39	per0114046a
14797-73-0	Perchlorate-101	.593	2.37	0.593	ug/kg	U	1	14-JAN-10 19:39	per0114046a
	Perchlorate-O(18)			5.62	ug/kg		1	14-JAN-10 19:39	per0114046a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7711

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228002

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.608	2.43	0.608	ug/kg	U	1	14-JAN-10 20:09	per0114049a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:09	per0114049a
14797-73-0	Perchlorate-101	.608	2.43	0.608	ug/kg	U	1	14-JAN-10 20:09	per0114049a
	Perchlorate-O(18)			6.08	ug/kg		1	14-JAN-10 20:09	per0114049a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7712

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228003

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.559	2.23	0.559	ug/kg	U	1	14-JAN-10 20:19	per0114050a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:19	per0114050a
14797-73-0	Perchlorate-101	.559	2.23	0.559	ug/kg	U	1	14-JAN-10 20:19	per0114050a
	Perchlorate-O(18)			5.55	ug/kg		1	14-JAN-10 20:19	per0114050a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7716

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228004

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 95.3

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.525	2.1	0.525	ug/kg	U	1	14-JAN-10 20:29	per0114051a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:29	per0114051a
14797-73-0	Perchlorate-101	.525	2.1	0.525	ug/kg	U	1	14-JAN-10 20:29	per0114051a
	Perchlorate-O(18)			5.23	ug/kg		1	14-JAN-10 20:29	per0114051a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7718

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228005

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.575	2.3	0.575	ug/kg	U	1	14-JAN-10 20:40	per0114052a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:40	per0114052a
14797-73-0	Perchlorate-101	.575	2.3	0.575	ug/kg	U	1	14-JAN-10 20:40	per0114052a
	Perchlorate-O(18)			5.68	ug/kg		1	14-JAN-10 20:40	per0114052a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7713

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228006

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.676	2.71	0.676	ug/kg	U	1	14-JAN-10 20:50	per0114053a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:50	per0114053a
14797-73-0	Perchlorate-101	.676	2.71	0.676	ug/kg	U	1	14-JAN-10 20:50	per0114053a
	Perchlorate-O(18)			6.43	ug/kg		1	14-JAN-10 20:50	per0114053a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-1161 VALIDATION DATE: 2/17/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. In the soil MB in batch 940174, Ba, Fe, and Sb were detected. The results for Sb in samples RE12-10-7699, -7706, and -7715 were detects ≤5X the MB concentration and, thus, were qualified U,I4. All other associated sample results for Sb were NDs and, thus, were not qualified. The results for Ba in samples -7710 and -7734 were detects >5X but ≤50X the MB concentration and, thus, were qualified J,I4a. All other associated sample results were detects >50X the MB concentrations and, thus, were not qualified based on professional judgment. In the soil MB in batch 940165, Fe was detected. The associated sample results were detects >50X the MB concentrations and, thus, were not qualified based on professional judgment.

2. In the aqueous ICB and/or CCBs, Se was detected. The associated result in sample -7737 was a detect ≤5X the greatest blank concentrations and, thus, were qualified U,I4b. The other associated sample result was an ND and, thus, was not qualified. In the soil ICB and/or CCBs associated with batches 940174 and 940165, Sb was detected. The results for Sb in samples -7699, -7706, -7709, -7712, and -7713, and -7715 were detects ≤5X the greatest blank concentration and, thus, were qualified U,I4b. All other associated sample results were NDs and, thus, were not qualified.

3. In the FR blanks (samples -7737 and -7738) associated with all field samples, K was detected. All associated sample results were detects >5X the greatest FR blank concentration and, thus, were not qualified.

4. The soil MS %Rs in batch 940174 were > the laboratory's UAL for K, Mg, Mn, and Na. The soil MS %Rs in batch 940165 were > the laboratory's UAL for Ca, K, and Mg. The associated sample results were detects and, thus, were qualified J+,I6b. The soil MS %Rs in batch 940174 were also > the laboratory's UAL for Al and Fe. The soil MS %Rs in batches 940165 and 943278 were < the laboratory's LAL but ≥10% for Fe and Mn and > the laboratory's UAL for Al and Hg. However, the associated parent sample results were >4X the spike concentrations and, thus, no sample

DATA VALIDATION COVER SHEET

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Data Validation Cover Sheet

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results were qualified, based on professional judgment.

5. The duplicate RPD was >35% for U in batch 940132 and Pb in batch 940165, and both the duplicate and parent sample results were ≥5X the PQL. The associated sample results were detects and, thus, were qualified J,I10a.
6. It should be noted that the aqueous matrix QC parent samples for all analyses *except* CVAA were from other LANL RNs. It should also be noted that the soil matrix QC parent samples for all analyses in batches 940123, 940165, and 943278 were from other LANL RNs. No sample results were qualified.

Reviewed by: Charissa Lewis Level: 1 Date: 2/18/10

VALIDATOR'S SIGNATURE: DATE: 2/17/10

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☒	☐	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☒	☐	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	23. The associated matrix spike recovery was <the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
☒	☐	☐	24. The associated matrix spike recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST

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Metals Analytical Data Validation Checklist

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Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
☒	☐	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	29. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☐	☒	32. The quantitating IS area count is <10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2 Metals Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
☐	☐	☒	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
☐	☐	☒	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
☐	☐	☒	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
☐	☒	☐	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244226001 **BASIS:** As Received **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7738 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	01/14/10 02:12	100113-2	940082
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/21/10 16:50	100121-5	940082
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	01/14/10 02:12	100113-2	940082
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/18/10 19:01	011810-1	940084
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/18/10 19:01	011810-1	940084
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	01/14/10 02:12	100113-2	940082
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/18/10 19:01	011810-1	940084
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	SKJ	01/14/10 02:12	100113-2	940082
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/14/10 10:32	011410W1-6	941150
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-09-7	Potassium	112	ug/L	J	50	150	150	1	P	HSC	01/18/10 19:01	011810-1	940084
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	01/14/10 23:45	100114-3	940082
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	SKJ	01/14/10 02:12	100113-2	940082
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/18/10 19:01	011810-1	940084

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940082	940079	SW846 3005A	50	mL	50	mL	01/11/10	FGA
940084	940083	SW846 3005A	50	mL	50	mL	01/11/10	FGA
941150	941148	SW846 7470A Prep	20	mL	20	mL	01/13/10	TXB3

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METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244226002 **BASIS:** As Received **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7737 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	01/14/10 02:18	100113-2	940082
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/21/10 16:52	100121-5	940082
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	01/14/10 02:18	100113-2	940082
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/18/10 19:22	011810-1	940084
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/18/10 19:22	011810-1	940084
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	01/14/10 02:18	100113-2	940082
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/18/10 19:22	011810-1	940084
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	SKJ	01/14/10 02:18	100113-2	940082
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/14/10 10:44	011410W1-6	941150
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-09-7	Potassium	120	ug/L	J	50	150	150	1	P	HSC	01/18/10 19:22	011810-1	940084
7782-49-2	Selenium U,I4b	6.69	ug/L	J	5	30	30	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	01/14/10 23:49	100114-3	940082
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	SKJ	01/14/10 02:18	100113-2	940082
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/18/10 19:22	011810-1	940084

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940082	940079	SW846 3005A	50	mL	50	mL	01/11/10	FGA
940084	940083	SW846 3005A	50	mL	50	mL	01/11/10	FGA
941150	941148	SW846 7470A Prep	20	mL	20	mL	01/13/10	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227001 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7734 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 93.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2280000	ug/Kg		6980	20500	20500	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-36-0	Antimony	1030	ug/Kg	U	339	1030	1030	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-38-2	Arsenic	0.796	mg/kg	J	0.211	1.06	1.06	2	MS	BAJ	01/15/10 23:12	100115-3	940132
7440-39-3	Barium J,I4a	20000	ug/Kg		103	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-41-7	Beryllium	0.414	mg/kg		0.0211	0.106	0.106	2	MS	BAJ	01/15/10 23:12	100115-3	940132
7440-43-9	Cadmium	513	ug/Kg	U	103	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-70-2	Calcium	553000	ug/Kg		8220	25700	25700	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-47-3	Chromium	11300	ug/Kg		154	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-48-4	Cobalt	736	ug/Kg		154	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-50-8	Copper	1730	ug/Kg		308	1030	1030	1	P	HSC	01/27/10 11:34	012710-1	940174
7439-89-6	Iron	8480000	ug/Kg		8220	25700	25700	1	P	HSC	01/27/10 11:34	012710-1	940174
7439-92-1	Lead	2450	ug/Kg		257	1030	1030	1	P	HSC	01/27/10 11:34	012710-1	940174
7439-95-4	Magnesium J+,I6b	412000	ug/Kg	N	8730	30800	30800	1	P	HSC	01/27/10 11:34	012710-1	940174
7439-96-5	Manganese J+,I6b	207000	ug/Kg	*N	205	1030	1030	1	P	HSC	01/27/10 11:34	012710-1	940174
7439-97-6	Mercury	12.7	ug/kg	U	4.31	12.7	12.7	1	AV	JXL1	01/28/10 09:17	012810S1-4	943287
7440-02-0	Nickel	3.06	mg/kg	*N	0.106	0.423	0.423	2	MS	BAJ	01/15/10 23:12	100115-3	940132
7440-09-7	Potassium J+,I6b	349000	ug/Kg	N	6570	25700	25700	1	P	HSC	01/27/10 11:34	012710-1	940174
7782-49-2	Selenium	1.06	mg/kg	U	0.529	1.06	1.06	2	MS	BAJ	01/15/10 23:12	100115-3	940132
7440-22-4	Silver	513	ug/Kg	U	103	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-23-5	Sodium J+,I6b	92400	ug/Kg	N	7190	25700	25700	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-28-0	Thallium	0.0926	mg/kg	J	0.0634	0.211	0.211	2	MS	SKJ	01/19/10 20:56	100119-2	940132
7440-61-1	Uranium J,I10a	0.595	mg/kg	*	0.014	0.0423	0.0423	2	MS	BAJ	01/15/10 23:12	100115-3	940132
7440-62-2	Vanadium	4690	ug/Kg		103	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-66-6	Zinc	38300	ug/Kg		339	1030	1030	1	P	HSC	01/27/10 11:34	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.521	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.506	g	30	mL	01/27/10	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227002 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7701 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5340000	ug/Kg		8740	25700	25700	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-36-0	Antimony	1280	ug/Kg	U	424	1280	1280	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-38-2	Arsenic	1.56	mg/kg		0.257	1.29	1.29	2	MS	BAJ	01/15/10 23:55	100115-3	940132
7440-39-3	Barium	59900	ug/Kg		128	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-41-7	Beryllium	0.457	mg/kg		0.0257	0.129	0.129	2	MS	BAJ	01/15/10 23:55	100115-3	940132
7440-43-9	Cadmium	228	ug/Kg	J	128	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-70-2	Calcium	988000	ug/Kg		10300	32100	32100	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-47-3	Chromium	8360	ug/Kg		193	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-48-4	Cobalt	2010	ug/Kg		193	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-50-8	Copper	6670	ug/Kg		385	1280	1280	1	P	HSC	01/27/10 11:59	012710-1	940174
7439-89-6	Iron	13500000	ug/Kg		10300	32100	32100	1	P	HSC	01/27/10 11:59	012710-1	940174
7439-92-1	Lead	10700	ug/Kg		321	1280	1280	1	P	HSC	01/27/10 11:59	012710-1	940174
7439-95-4	Magnesium J+,I6b	1090000	ug/Kg	N	10900	38500	38500	1	P	HSC	01/27/10 11:59	012710-1	940174
7439-96-5	Manganese J+,I6b	314000	ug/Kg	*N	257	1280	1280	1	P	HSC	01/27/10 11:59	012710-1	940174
7439-97-6	Mercury	8.61	ug/kg	J	5.32	15.7	15.7	1	AV	JXL1	01/28/10 09:25	012810S1-4	943287
7440-02-0	Nickel	3.78	mg/kg	*N	0.129	0.515	0.515	2	MS	BAJ	01/15/10 23:55	100115-3	940132
7440-09-7	Potassium J+,I6b	834000	ug/Kg	N	8220	32100	32100	1	P	HSC	01/27/10 11:59	012710-1	940174
7782-49-2	Selenium	1.29	mg/kg	U	0.644	1.29	1.29	2	MS	BAJ	01/15/10 23:55	100115-3	940132
7440-22-4	Silver	642	ug/Kg	U	128	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-23-5	Sodium J+,I6b	85900	ug/Kg	N	8990	32100	32100	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-28-0	Thallium	0.0875	mg/kg	J	0.0772	0.257	0.257	2	MS	SKJ	01/19/10 21:22	100119-2	940132
7440-61-1	Uranium J,I10a	4.92	mg/kg	*	0.017	0.0515	0.0515	2	MS	BAJ	01/15/10 23:55	100115-3	940132
7440-62-2	Vanadium	12300	ug/Kg		128	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-66-6	Zinc	52400	ug/Kg		424	1280	1280	1	P	HSC	01/27/10 11:59	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.522	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.523	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.515	g	30	mL	01/27/10	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227003 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7702 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3850000	ug/Kg		7370	21700	21700	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-36-0	Antimony	1080	ug/Kg	U	358	1080	1080	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-38-2	Arsenic	1.34	mg/kg		0.232	1.16	1.16	2	MS	BAJ	01/16/10 00:01	100115-3	940132
7440-39-3	Barium	31100	ug/Kg		108	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-41-7	Beryllium	0.532	mg/kg		0.0232	0.116	0.116	2	MS	BAJ	01/16/10 00:01	100115-3	940132
7440-43-9	Cadmium	542	ug/Kg	U	108	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-70-2	Calcium	721000	ug/Kg		8670	27100	27100	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-47-3	Chromium	11400	ug/Kg		163	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-48-4	Cobalt	1030	ug/Kg		163	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-50-8	Copper	2620	ug/Kg		325	1080	1080	1	P	HSC	01/27/10 12:03	012710-1	940174
7439-89-6	Iron	9650000	ug/Kg		8670	27100	27100	1	P	HSC	01/27/10 12:03	012710-1	940174
7439-92-1	Lead	3800	ug/Kg		271	1080	1080	1	P	HSC	01/27/10 12:03	012710-1	940174
7439-95-4	Magnesium J+,I6b	720000	ug/Kg	N	9210	32500	32500	1	P	HSC	01/27/10 12:03	012710-1	940174
7439-96-5	Manganese J+,I6b	280000	ug/Kg	*N	217	1080	1080	1	P	HSC	01/27/10 12:03	012710-1	940174
7439-97-6	Mercury	8.53	ug/kg	J	4.23	12.5	12.5	1	AV	JXL1	01/28/10 09:26	012810S1-4	943287
7440-02-0	Nickel	3.07	mg/kg	*N	0.116	0.464	0.464	2	MS	BAJ	01/16/10 00:01	100115-3	940132
7440-09-7	Potassium J+,I6b	520000	ug/Kg	N	6930	27100	27100	1	P	HSC	01/27/10 12:03	012710-1	940174
7782-49-2	Selenium	1.16	mg/kg	U	0.58	1.16	1.16	2	MS	BAJ	01/16/10 00:01	100115-3	940132
7440-22-4	Silver	542	ug/Kg	U	108	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-23-5	Sodium J+,I6b	94600	ug/Kg	N	7580	27100	27100	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-28-0	Thallium	0.232	mg/kg	U	0.0696	0.232	0.232	2	MS	SKJ	01/19/10 21:33	100119-2	940132
7440-61-1	Uranium J,I10a	1.04	mg/kg	*	0.0153	0.0464	0.0464	2	MS	BAJ	01/16/10 00:01	100115-3	940132
7440-62-2	Vanadium	6580	ug/Kg		108	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-66-6	Zinc	39100	ug/Kg		358	1080	1080	1	P	HSC	01/27/10 12:03	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.507	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.543	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.567	g	30	mL	01/27/10	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227004 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7700 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 93.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3750000	ug/Kg		7020	20700	20700	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-36-0	Antimony	1030	ug/Kg	U	341	1030	1030	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-38-2	Arsenic	1.03	mg/kg		0.196	0.979	0.979	2	MS	BAJ	01/16/10 00:08	100115-3	940132
7440-39-3	Barium	49200	ug/Kg		103	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-41-7	Beryllium	0.349	mg/kg		0.0196	0.0979	0.0979	2	MS	BAJ	01/16/10 00:08	100115-3	940132
7440-43-9	Cadmium	516	ug/Kg	U	103	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-70-2	Calcium	990000	ug/Kg		8260	25800	25800	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-47-3	Chromium	22900	ug/Kg		155	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-48-4	Cobalt	1380	ug/Kg		155	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-50-8	Copper	3300	ug/Kg		310	1030	1030	1	P	HSC	01/27/10 12:07	012710-1	940174
7439-89-6	Iron	12100000	ug/Kg		8260	25800	25800	1	P	HSC	01/27/10 12:07	012710-1	940174
7439-92-1	Lead	3850	ug/Kg		258	1030	1030	1	P	HSC	01/27/10 12:07	012710-1	940174
7439-95-4	Magnesium J+,I6b	1010000	ug/Kg	N	8780	31000	31000	1	P	HSC	01/27/10 12:07	012710-1	940174
7439-96-5	Manganese J+,I6b	166000	ug/Kg	*N	207	1030	1030	1	P	HSC	01/27/10 12:07	012710-1	940174
7439-97-6	Mercury	13.1	ug/kg		4.13	12.1	12.1	1	AV	JXL1	01/28/10 09:28	012810S1-4	943287
7440-02-0	Nickel	4.09	mg/kg	*N	0.0979	0.392	0.392	2	MS	BAJ	01/16/10 00:08	100115-3	940132
7440-09-7	Potassium J+,I6b	745000	ug/Kg	N	6610	25800	25800	1	P	HSC	01/27/10 12:07	012710-1	940174
7782-49-2	Selenium	0.979	mg/kg	U	0.49	0.979	0.979	2	MS	BAJ	01/16/10 00:08	100115-3	940132
7440-22-4	Silver	516	ug/Kg	U	103	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-23-5	Sodium J+,I6b	215000	ug/Kg	N	7230	25800	25800	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-28-0	Thallium	0.0668	mg/kg	J	0.0588	0.196	0.196	2	MS	SKJ	01/19/10 21:36	100119-2	940132
7440-61-1	Uranium J,I10a	0.397	mg/kg	*	0.0129	0.0392	0.0392	2	MS	BAJ	01/16/10 00:08	100115-3	940132
7440-62-2	Vanadium	10000	ug/Kg		103	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-66-6	Zinc	40100	ug/Kg		341	1030	1030	1	P	HSC	01/27/10 12:07	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.545	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.517	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.528	g	30	mL	01/27/10	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227005 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7699 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9430000	ug/Kg		8170	24000	24000	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-36-0	Antimony U,I4	433	ug/Kg	J	397	1200	1200	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-38-2	Arsenic	2.4	mg/kg		0.245	1.22	1.22	2	MS	BAJ	01/16/10 00:14	100115-3	940132
7440-39-3	Barium	101000	ug/Kg		120	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-41-7	Beryllium	0.806	mg/kg		0.0245	0.122	0.122	2	MS	BAJ	01/16/10 00:14	100115-3	940132
7440-43-9	Cadmium	601	ug/Kg	U	120	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-70-2	Calcium	1830000	ug/Kg		9610	30000	30000	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-47-3	Chromium	42900	ug/Kg		180	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-48-4	Cobalt	4860	ug/Kg		180	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-50-8	Copper	5920	ug/Kg		361	1200	1200	1	P	HSC	01/27/10 12:10	012710-1	940174
7439-89-6	Iron	16000000	ug/Kg		9610	30000	30000	1	P	HSC	01/27/10 12:10	012710-1	940174
7439-92-1	Lead	12000	ug/Kg		300	1200	1200	1	P	HSC	01/27/10 12:10	012710-1	940174
7439-95-4	Magnesium J+,I6b	1720000	ug/Kg	N	10200	36100	36100	1	P	HSC	01/27/10 12:10	012710-1	940174
7439-96-5	Manganese J+,I6b	301000	ug/Kg	*N	240	1200	1200	1	P	HSC	01/27/10 12:10	012710-1	940174
7439-97-6	Mercury	17.5	ug/kg		4.47	13.1	13.1	1	AV	JXL1	01/28/10 09:33	012810S1-4	943287
7440-02-0	Nickel	9.08	mg/kg	*N	0.122	0.489	0.489	2	MS	BAJ	01/16/10 00:14	100115-3	940132
7440-09-7	Potassium J+,I6b	1640000	ug/Kg	N	7690	30000	30000	1	P	HSC	01/27/10 12:10	012710-1	940174
7782-49-2	Selenium	1.22	mg/kg	U	0.611	1.22	1.22	2	MS	BAJ	01/16/10 00:14	100115-3	940132
7440-22-4	Silver	601	ug/Kg	U	120	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-23-5	Sodium J+,I6b	81200	ug/Kg	N	8410	30000	30000	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-28-0	Thallium	0.165	mg/kg	J	0.0734	0.245	0.245	2	MS	SKJ	01/19/10 21:40	100119-2	940132
7440-61-1	Uranium J,I10a	3.59	mg/kg	*	0.0161	0.0489	0.0489	2	MS	BAJ	01/16/10 00:14	100115-3	940132
7440-62-2	Vanadium	25000	ug/Kg		120	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-66-6	Zinc	41000	ug/Kg		397	1200	1200	1	P	HSC	01/27/10 12:10	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.514	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.523	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.574	g	30	mL	01/27/10	TXB3

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227006 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7727 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4800000	ug/Kg		8900	26200	26200	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-36-0	Antimony	1310	ug/Kg	U	432	1310	1310	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-38-2	Arsenic	1.87	mg/kg		0.261	1.31	1.31	2	MS	BAJ	01/16/10 00:20	100115-3	940132
7440-39-3	Barium	52200	ug/Kg		131	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-41-7	Beryllium	0.535	mg/kg		0.0261	0.131	0.131	2	MS	BAJ	01/16/10 00:20	100115-3	940132
7440-43-9	Cadmium	655	ug/Kg	U	131	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-70-2	Calcium	1060000	ug/Kg		10500	32700	32700	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-47-3	Chromium	9310	ug/Kg		196	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-48-4	Cobalt	2270	ug/Kg		196	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-50-8	Copper	3970	ug/Kg		393	1310	1310	1	P	HSC	01/27/10 12:14	012710-1	940174
7439-89-6	Iron	14500000	ug/Kg		10500	32700	32700	1	P	HSC	01/27/10 12:14	012710-1	940174
7439-92-1	Lead	9810	ug/Kg		327	1310	1310	1	P	HSC	01/27/10 12:14	012710-1	940174
7439-95-4	Magnesium J+,I6b	924000	ug/Kg	N	11100	39300	39300	1	P	HSC	01/27/10 12:14	012710-1	940174
7439-96-5	Manganese J+,I6b	302000	ug/Kg	*N	262	1310	1310	1	P	HSC	01/27/10 12:14	012710-1	940174
7439-97-6	Mercury	18.2	ug/kg		5.4	15.9	15.9	1	AV	JXL1	01/28/10 09:35	012810S1-4	943287
7440-02-0	Nickel	3.81	mg/kg	*N	0.131	0.523	0.523	2	MS	BAJ	01/16/10 00:20	100115-3	940132
7440-09-7	Potassium J+,I6b	730000	ug/Kg	N	8380	32700	32700	1	P	HSC	01/27/10 12:14	012710-1	940174
7782-49-2	Selenium	1.31	mg/kg	U	0.653	1.31	1.31	2	MS	BAJ	01/16/10 00:20	100115-3	940132
7440-22-4	Silver	655	ug/Kg	U	131	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-23-5	Sodium J+,I6b	69100	ug/Kg	N	9170	32700	32700	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-28-0	Thallium	0.0802	mg/kg	J	0.0784	0.261	0.261	2	MS	SKJ	01/19/10 21:44	100119-2	940132
7440-61-1	Uranium J,I10a	3.66	mg/kg	*	0.0173	0.0523	0.0523	2	MS	BAJ	01/16/10 00:20	100115-3	940132
7440-62-2	Vanadium	15200	ug/Kg		131	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-66-6	Zinc	55300	ug/Kg		432	1310	1310	1	P	HSC	01/27/10 12:14	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.512	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.511	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.506	g	30	mL	01/27/10	TXB3

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227007 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7710 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 93.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2380000	ug/Kg		7050	20700	20700	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-36-0	Antimony	1040	ug/Kg	U	342	1040	1040	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-38-2	Arsenic	0.746	mg/kg	J	0.204	1.02	1.02	2	MS	BAJ	01/16/10 00:26	100115-3	940132
7440-39-3	Barium J,I4a	23200	ug/Kg		104	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-41-7	Beryllium	0.326	mg/kg		0.0204	0.102	0.102	2	MS	BAJ	01/16/10 00:26	100115-3	940132
7440-43-9	Cadmium	519	ug/Kg	U	104	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-70-2	Calcium	591000	ug/Kg		8300	25900	25900	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-47-3	Chromium	12800	ug/Kg		156	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-48-4	Cobalt	805	ug/Kg		156	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-50-8	Copper	1870	ug/Kg		311	1040	1040	1	P	HSC	01/27/10 12:18	012710-1	940174
7439-89-6	Iron	9540000	ug/Kg		8300	25900	25900	1	P	HSC	01/27/10 12:18	012710-1	940174
7439-92-1	Lead	3170	ug/Kg		259	1040	1040	1	P	HSC	01/27/10 12:18	012710-1	940174
7439-95-4	Magnesium J+,I6b	440000	ug/Kg	N	8820	31100	31100	1	P	HSC	01/27/10 12:18	012710-1	940174
7439-96-5	Manganese J+,I6b	270000	ug/Kg	*N	207	1040	1040	1	P	HSC	01/27/10 12:18	012710-1	940174
7439-97-6	Mercury	11.3	ug/kg	U	3.86	11.3	11.3	1	AV	JXL1	01/28/10 09:36	012810S1-4	943287
7440-02-0	Nickel	2.17	mg/kg	*N	0.102	0.408	0.408	2	MS	BAJ	01/16/10 00:26	100115-3	940132
7440-09-7	Potassium J+,I6b	369000	ug/Kg	N	6640	25900	25900	1	P	HSC	01/27/10 12:18	012710-1	940174
7782-49-2	Selenium	1.02	mg/kg	U	0.511	1.02	1.02	2	MS	BAJ	01/16/10 00:26	100115-3	940132
7440-22-4	Silver	519	ug/Kg	U	104	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-23-5	Sodium J+,I6b	103000	ug/Kg	N	7260	25900	25900	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-28-0	Thallium	0.204	mg/kg	U	0.0613	0.204	0.204	2	MS	SKJ	01/19/10 21:55	100119-2	940132
7440-61-1	Uranium J,I10a	0.457	mg/kg	*	0.0135	0.0408	0.0408	2	MS	BAJ	01/16/10 00:26	100115-3	940132
7440-62-2	Vanadium	5290	ug/Kg		104	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-66-6	Zinc	43500	ug/Kg		342	1040	1040	1	P	HSC	01/27/10 12:18	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.523	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.515	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.565	g	30	mL	01/27/10	TXB3

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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227008 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7715 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6720000	ug/Kg		8950	26300	26300	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-36-0	Antimony U,I4	631	ug/Kg	J	434	1320	1320	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-38-2	Arsenic	2.5	mg/kg		0.258	1.29	1.29	2	MS	BAJ	01/16/10 00:32	100115-3	940132
7440-39-3	Barium	121000	ug/Kg		132	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-41-7	Beryllium	0.722	mg/kg		0.0258	0.129	0.129	2	MS	BAJ	01/16/10 00:32	100115-3	940132
7440-43-9	Cadmium	364	ug/Kg	J	132	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-70-2	Calcium	4640000	ug/Kg		10500	32900	32900	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-47-3	Chromium	13000	ug/Kg		197	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-48-4	Cobalt	3440	ug/Kg		197	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-50-8	Copper	9440	ug/Kg		395	1320	1320	1	P	HSC	01/27/10 12:21	012710-1	940174
7439-89-6	Iron	12400000	ug/Kg		10500	32900	32900	1	P	HSC	01/27/10 12:21	012710-1	940174
7439-92-1	Lead	20200	ug/Kg		329	1320	1320	1	P	HSC	01/27/10 12:21	012710-1	940174
7439-95-4	Magnesium J+,I6b	1710000	ug/Kg	N	11200	39500	39500	1	P	HSC	01/27/10 12:21	012710-1	940174
7439-96-5	Manganese J+,I6b	451000	ug/Kg	*N	263	1320	1320	1	P	HSC	01/27/10 12:21	012710-1	940174
7439-97-6	Mercury	16.2	ug/kg		5.24	15.4	15.4	1	AV	JXL1	01/28/10 09:38	012810S1-4	943287
7440-02-0	Nickel	6.05	mg/kg	*N	0.129	0.516	0.516	2	MS	BAJ	01/16/10 00:32	100115-3	940132
7440-09-7	Potassium J+,I6b	1590000	ug/Kg	N	8420	32900	32900	1	P	HSC	01/27/10 12:21	012710-1	940174
7782-49-2	Selenium	1.29	mg/kg	U	0.646	1.29	1.29	2	MS	BAJ	01/16/10 00:32	100115-3	940132
7440-22-4	Silver	658	ug/Kg	U	132	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-23-5	Sodium J+,I6b	107000	ug/Kg	N	9210	32900	32900	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-28-0	Thallium	0.130	mg/kg	J	0.0775	0.258	0.258	2	MS	SKJ	01/19/10 21:59	100119-2	940132
7440-61-1	Uranium J,I10a	8.43	mg/kg	*	0.017	0.0516	0.0516	2	MS	BAJ	01/16/10 00:32	100115-3	940132
7440-62-2	Vanadium	16300	ug/Kg		132	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-66-6	Zinc	55800	ug/Kg		434	1320	1320	1	P	HSC	01/27/10 12:21	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.523	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.513	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.526	g	30	mL	01/27/10	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227009 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7707 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 79

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7330000	ug/Kg		8550	25100	25100	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-36-0	Antimony	1260	ug/Kg	U	415	1260	1260	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-38-2	Arsenic	2.16	mg/kg		0.25	1.25	1.25	2	MS	BAJ	01/16/10 00:51	100115-3	940132
7440-39-3	Barium	96900	ug/Kg		126	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-41-7	Beryllium	0.645	mg/kg		0.025	0.125	0.125	2	MS	BAJ	01/16/10 00:51	100115-3	940132
7440-43-9	Cadmium	187	ug/Kg	J	126	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-70-2	Calcium	1850000	ug/Kg		10100	31400	31400	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-47-3	Chromium	23900	ug/Kg		189	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-48-4	Cobalt	4520	ug/Kg		189	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-50-8	Copper	7150	ug/Kg		377	1260	1260	1	P	HSC	01/27/10 12:32	012710-1	940174
7439-89-6	Iron	14100000	ug/Kg		10100	31400	31400	1	P	HSC	01/27/10 12:32	012710-1	940174
7439-92-1	Lead	13900	ug/Kg		314	1260	1260	1	P	HSC	01/27/10 12:32	012710-1	940174
7439-95-4	Magnesium J+,I6b	1380000	ug/Kg	N	10700	37700	37700	1	P	HSC	01/27/10 12:32	012710-1	940174
7439-96-5	Manganese J+,I6b	355000	ug/Kg	*N	251	1260	1260	1	P	HSC	01/27/10 12:32	012710-1	940174
7439-97-6	Mercury	17.1	ug/kg		4.78	14.1	14.1	1	AV	JXL1	01/28/10 09:40	012810S1-4	943287
7440-02-0	Nickel	6.29	mg/kg	*N	0.125	0.5	0.5	2	MS	BAJ	01/16/10 00:51	100115-3	940132
7440-09-7	Potassium J+,I6b	1280000	ug/Kg	N	8040	31400	31400	1	P	HSC	01/27/10 12:32	012710-1	940174
7782-49-2	Selenium	1.25	mg/kg	U	0.625	1.25	1.25	2	MS	BAJ	01/16/10 00:51	100115-3	940132
7440-22-4	Silver	628	ug/Kg	U	126	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-23-5	Sodium J+,I6b	74300	ug/Kg	N	8800	31400	31400	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-28-0	Thallium	0.146	mg/kg	J	0.075	0.25	0.25	2	MS	SKJ	01/19/10 22:03	100119-2	940132
7440-61-1	Uranium J,I10a	5.55	mg/kg	*	0.0165	0.05	0.05	2	MS	BAJ	01/16/10 00:51	100115-3	940132
7440-62-2	Vanadium	22200	ug/Kg		126	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-66-6	Zinc	42300	ug/Kg		415	1260	1260	1	P	HSC	01/27/10 12:32	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.509	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.543	g	30	mL	01/27/10	TXB3

LMF
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227010 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7719 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3590000	ug/Kg		8070	23700	23700	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-36-0	Antimony	1190	ug/Kg	U	392	1190	1190	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-38-2	Arsenic	1.59	mg/kg		0.224	1.12	1.12	2	MS	BAJ	01/16/10 00:57	100115-3	940132
7440-39-3	Barium	36900	ug/Kg		119	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-41-7	Beryllium	0.435	mg/kg		0.0224	0.112	0.112	2	MS	BAJ	01/16/10 00:57	100115-3	940132
7440-43-9	Cadmium	594	ug/Kg	U	119	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-70-2	Calcium	1190000	ug/Kg		9500	29700	29700	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-47-3	Chromium	8030	ug/Kg		178	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-48-4	Cobalt	1690	ug/Kg		178	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-50-8	Copper	3330	ug/Kg		356	1190	1190	1	P	HSC	01/27/10 12:36	012710-1	940174
7439-89-6	Iron	12800000	ug/Kg		9500	29700	29700	1	P	HSC	01/27/10 12:36	012710-1	940174
7439-92-1	Lead	8120	ug/Kg		297	1190	1190	1	P	HSC	01/27/10 12:36	012710-1	940174
7439-95-4	Magnesium J+,I6b	782000	ug/Kg	N	10100	35600	35600	1	P	HSC	01/27/10 12:36	012710-1	940174
7439-96-5	Manganese J+,I6b	203000	ug/Kg	*N	237	1190	1190	1	P	HSC	01/27/10 12:36	012710-1	940174
7439-97-6	Mercury	10.8	ug/kg	J	4.45	13.1	13.1	1	AV	JXL1	01/28/10 09:42	012810S1-4	943287
7440-02-0	Nickel	3.58	mg/kg	*N	0.112	0.448	0.448	2	MS	BAJ	01/16/10 00:57	100115-3	940132
7440-09-7	Potassium J+,I6b	634000	ug/Kg	N	7600	29700	29700	1	P	HSC	01/27/10 12:36	012710-1	940174
7782-49-2	Selenium	1.12	mg/kg	U	0.56	1.12	1.12	2	MS	BAJ	01/16/10 00:57	100115-3	940132
7440-22-4	Silver	594	ug/Kg	U	119	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-23-5	Sodium J+,I6b	80300	ug/Kg	N	8310	29700	29700	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-28-0	Thallium	0.0711	mg/kg	J	0.0672	0.224	0.224	2	MS	SKJ	01/19/10 22:06	100119-2	940132
7440-61-1	Uranium J,I10a	3.18	mg/kg	*	0.0148	0.0448	0.0448	2	MS	BAJ	01/16/10 00:57	100115-3	940132
7440-62-2	Vanadium	13200	ug/Kg		119	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-66-6	Zinc	47400	ug/Kg		392	1190	1190	1	P	HSC	01/27/10 12:36	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.535	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.55	g	30	mL	01/27/10	TXB3

LMF
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227011 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7717 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2980000	ug/Kg		8290	24400	24400	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-36-0	Antimony	1220	ug/Kg	U	402	1220	1220	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-38-2	Arsenic	0.886	mg/kg	J	0.241	1.2	1.2	2	MS	BAJ	01/16/10 01:03	100115-3	940132
7440-39-3	Barium	31100	ug/Kg		122	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-41-7	Beryllium	0.233	mg/kg		0.0241	0.12	0.12	2	MS	BAJ	01/16/10 01:03	100115-3	940132
7440-43-9	Cadmium	132	ug/Kg	J	122	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-70-2	Calcium	588000	ug/Kg		9750	30500	30500	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-47-3	Chromium	2820	ug/Kg		183	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-48-4	Cobalt	1470	ug/Kg		183	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-50-8	Copper	2510	ug/Kg		366	1220	1220	1	P	HSC	01/27/10 12:40	012710-1	940174
7439-89-6	Iron	7800000	ug/Kg		9750	30500	30500	1	P	HSC	01/27/10 12:40	012710-1	940174
7439-92-1	Lead	6550	ug/Kg		305	1220	1220	1	P	HSC	01/27/10 12:40	012710-1	940174
7439-95-4	Magnesium J+,I6b	576000	ug/Kg	N	10400	36600	36600	1	P	HSC	01/27/10 12:40	012710-1	940174
7439-96-5	Manganese J+,I6b	203000	ug/Kg	*N	244	1220	1220	1	P	HSC	01/27/10 12:40	012710-1	940174
7439-97-6	Mercury	12.5	ug/kg	U	4.24	12.5	12.5	1	AV	JXL1	01/28/10 09:43	012810S1-4	943287
7440-02-0	Nickel	1.79	mg/kg	*N	0.12	0.482	0.482	2	MS	BAJ	01/16/10 01:03	100115-3	940132
7440-09-7	Potassium J+,I6b	554000	ug/Kg	N	7800	30500	30500	1	P	HSC	01/27/10 12:40	012710-1	940174
7782-49-2	Selenium	1.2	mg/kg	U	0.602	1.2	1.2	2	MS	BAJ	01/16/10 01:03	100115-3	940132
7440-22-4	Silver	609	ug/Kg	U	122	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-23-5	Sodium J+,I6b	42300	ug/Kg	N	8530	30500	30500	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-28-0	Thallium	0.241	mg/kg	U	0.0722	0.241	0.241	2	MS	SKJ	01/19/10 22:17	100119-2	940132
7440-61-1	Uranium J,I10a	1.56	mg/kg	*	0.0159	0.0482	0.0482	2	MS	BAJ	01/16/10 01:03	100115-3	940132
7440-62-2	Vanadium	7980	ug/Kg		122	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-66-6	Zinc	30300	ug/Kg		402	1220	1220	1	P	HSC	01/27/10 12:40	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.508	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.502	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.589	g	30	mL	01/27/10	TXB3

LMF
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227012 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7708 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 96.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10800000	ug/Kg		6730	19800	19800	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-36-0	Antimony	990	ug/Kg	U	327	990	990	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-38-2	Arsenic	1.77	mg/kg		0.206	1.03	1.03	2	MS	BAJ	01/16/10 01:09	100115-3	940132
7440-39-3	Barium	197000	ug/Kg		99	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-41-7	Beryllium	0.675	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	01/16/10 01:09	100115-3	940132
7440-43-9	Cadmium	133	ug/Kg	J	99	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-70-2	Calcium	2780000	ug/Kg		7920	24700	24700	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-47-3	Chromium	12400	ug/Kg		148	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-48-4	Cobalt	5700	ug/Kg		148	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-50-8	Copper	6770	ug/Kg		297	990	990	1	P	HSC	01/27/10 12:44	012710-1	940174
7439-89-6	Iron	14000000	ug/Kg		7920	24700	24700	1	P	HSC	01/27/10 12:44	012710-1	940174
7439-92-1	Lead	15400	ug/Kg		247	990	990	1	P	HSC	01/27/10 12:44	012710-1	940174
7439-95-4	Magnesium J+,I6b	1910000	ug/Kg	N	8410	29700	29700	1	P	HSC	01/27/10 12:44	012710-1	940174
7439-96-5	Manganese J+,I6b	438000	ug/Kg	*N	198	990	990	1	P	HSC	01/27/10 12:44	012710-1	940174
7439-97-6	Mercury	8	ug/kg	J	4	11.8	11.8	1	AV	JXL1	01/28/10 09:45	012810S1-4	943287
7440-02-0	Nickel	5.75	mg/kg	*N	0.103	0.412	0.412	2	MS	BAJ	01/16/10 01:09	100115-3	940132
7440-09-7	Potassium J+,I6b	1660000	ug/Kg	N	6330	24700	24700	1	P	HSC	01/27/10 12:44	012710-1	940174
7782-49-2	Selenium	1.03	mg/kg	U	0.516	1.03	1.03	2	MS	BAJ	01/16/10 01:09	100115-3	940132
7440-22-4	Silver	495	ug/Kg	U	99	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-23-5	Sodium J+,I6b	95700	ug/Kg	N	6930	24700	24700	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-28-0	Thallium	0.151	mg/kg	J	0.0619	0.206	0.206	2	MS	SKJ	01/19/10 22:21	100119-2	940132
7440-61-1	Uranium J,I10a	0.999	mg/kg	*	0.0136	0.0412	0.0412	2	MS	BAJ	01/16/10 01:09	100115-3	940132
7440-62-2	Vanadium	27800	ug/Kg		99	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-66-6	Zinc	28200	ug/Kg		327	990	990	1	P	HSC	01/27/10 12:44	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.501	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.522	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.527	g	30	mL	01/27/10	TXB3

LMF
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227013 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7706 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10800000	ug/Kg		7230	21300	21300	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-36-0	Antimony U,I4	438	ug/Kg	J	351	1060	1060	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-38-2	Arsenic	1.78	mg/kg		0.22	1.1	1.1	2	MS	BAJ	01/16/10 01:15	100115-3	940132
7440-39-3	Barium	102000	ug/Kg		106	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-41-7	Beryllium	0.816	mg/kg		0.022	0.11	0.11	2	MS	BAJ	01/16/10 01:15	100115-3	940132
7440-43-9	Cadmium	532	ug/Kg	U	106	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-70-2	Calcium	1850000	ug/Kg		8510	26600	26600	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-47-3	Chromium	14700	ug/Kg		160	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-48-4	Cobalt	3150	ug/Kg		160	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-50-8	Copper	6600	ug/Kg		319	1060	1060	1	P	HSC	01/27/10 12:47	012710-1	940174
7439-89-6	Iron	14600000	ug/Kg		8510	26600	26600	1	P	HSC	01/27/10 12:47	012710-1	940174
7439-92-1	Lead	8610	ug/Kg		266	1060	1060	1	P	HSC	01/27/10 12:47	012710-1	940174
7439-95-4	Magnesium J+,I6b	2060000	ug/Kg	N	9040	31900	31900	1	P	HSC	01/27/10 12:47	012710-1	940174
7439-96-5	Manganese J+,I6b	167000	ug/Kg	*N	213	1060	1060	1	P	HSC	01/27/10 12:47	012710-1	940174
7439-97-6	Mercury	23.5	ug/kg		4.42	13	13	1	AV	JXL1	01/28/10 09:47	012810S1-4	943287
7440-02-0	Nickel	6.8	mg/kg	*N	0.11	0.44	0.44	2	MS	BAJ	01/16/10 01:15	100115-3	940132
7440-09-7	Potassium J+,I6b	1800000	ug/Kg	N	6810	26600	26600	1	P	HSC	01/27/10 12:47	012710-1	940174
7782-49-2	Selenium	1.1	mg/kg	U	0.55	1.1	1.1	2	MS	BAJ	01/16/10 01:15	100115-3	940132
7440-22-4	Silver	532	ug/Kg	U	106	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-23-5	Sodium J+,I6b	96300	ug/Kg	N	7440	26600	26600	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-28-0	Thallium	0.154	mg/kg	J	0.0659	0.22	0.22	2	MS	SKJ	01/19/10 22:25	100119-2	940132
7440-61-1	Uranium J,I10a	0.736	mg/kg	*	0.0145	0.044	0.044	2	MS	BAJ	01/16/10 01:15	100115-3	940132
7440-62-2	Vanadium	19100	ug/Kg		106	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-66-6	Zinc	36300	ug/Kg		351	1060	1060	1	P	HSC	01/27/10 12:47	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.507	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.524	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.514	g	30	mL	01/27/10	TXB3

LMF
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227014 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7714 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4710000	ug/Kg		7230	21300	21300	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-36-0	Antimony	1060	ug/Kg	U	351	1060	1060	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-38-2	Arsenic	2.04	mg/kg		0.213	1.07	1.07	2	MS	BAJ	01/16/10 01:22	100115-3	940132
7440-39-3	Barium	52400	ug/Kg		106	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-41-7	Beryllium	0.640	mg/kg		0.0213	0.107	0.107	2	MS	BAJ	01/16/10 01:22	100115-3	940132
7440-43-9	Cadmium	532	ug/Kg	U	106	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-70-2	Calcium	1080000	ug/Kg		8510	26600	26600	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-47-3	Chromium	5070	ug/Kg		160	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-48-4	Cobalt	2370	ug/Kg		160	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-50-8	Copper	3540	ug/Kg		319	1060	1060	1	P	HSC	01/27/10 12:51	012710-1	940174
7439-89-6	Iron	11700000	ug/Kg		8510	26600	26600	1	P	HSC	01/27/10 12:51	012710-1	940174
7439-92-1	Lead	6560	ug/Kg		266	1060	1060	1	P	HSC	01/27/10 12:51	012710-1	940174
7439-95-4	Magnesium J+,I6b	904000	ug/Kg	N	9040	31900	31900	1	P	HSC	01/27/10 12:51	012710-1	940174
7439-96-5	Manganese J+,I6b	321000	ug/Kg	*N	213	1060	1060	1	P	HSC	01/27/10 12:51	012710-1	940174
7439-97-6	Mercury	11.5	ug/kg	J	4.32	12.7	12.7	1	AV	JXL1	01/28/10 09:48	012810S1-4	943287
7440-02-0	Nickel	3.21	mg/kg	*N	0.107	0.426	0.426	2	MS	BAJ	01/16/10 01:22	100115-3	940132
7440-09-7	Potassium J+,I6b	681000	ug/Kg	N	6810	26600	26600	1	P	HSC	01/27/10 12:51	012710-1	940174
7782-49-2	Selenium	1.07	mg/kg	U	0.533	1.07	1.07	2	MS	BAJ	01/16/10 01:22	100115-3	940132
7440-22-4	Silver	532	ug/Kg	U	106	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-23-5	Sodium J+,I6b	85100	ug/Kg	N	7450	26600	26600	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-28-0	Thallium	0.0689	mg/kg	J	0.064	0.213	0.213	2	MS	SKJ	01/19/10 22:29	100119-2	940132
7440-61-1	Uranium J,I10a	0.557	mg/kg	*	0.0141	0.0426	0.0426	2	MS	BAJ	01/16/10 01:22	100115-3	940132
7440-62-2	Vanadium	12700	ug/Kg		106	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-66-6	Zinc	38400	ug/Kg		351	1060	1060	1	P	HSC	01/27/10 12:51	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.519	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.52	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.523	g	30	mL	01/27/10	TXB3

LMF
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227015 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7705 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6290000	ug/Kg		7690	22600	22600	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-36-0	Antimony	1130	ug/Kg	U	373	1130	1130	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-38-2	Arsenic	1.32	mg/kg		0.23	1.15	1.15	2	MS	BAJ	01/16/10 01:28	100115-3	940132
7440-39-3	Barium	75900	ug/Kg		113	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-41-7	Beryllium	0.548	mg/kg		0.023	0.115	0.115	2	MS	BAJ	01/16/10 01:28	100115-3	940132
7440-43-9	Cadmium	565	ug/Kg	U	113	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-70-2	Calcium	1010000	ug/Kg		9040	28300	28300	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-47-3	Chromium	19200	ug/Kg		170	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-48-4	Cobalt	3800	ug/Kg		170	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-50-8	Copper	7870	ug/Kg		339	1130	1130	1	P	HSC	01/27/10 12:55	012710-1	940174
7439-89-6	Iron	12200000	ug/Kg		9040	28300	28300	1	P	HSC	01/27/10 12:55	012710-1	940174
7439-92-1	Lead	7650	ug/Kg		283	1130	1130	1	P	HSC	01/27/10 12:55	012710-1	940174
7439-95-4	Magnesium J+,I6b	1180000	ug/Kg	N	9610	33900	33900	1	P	HSC	01/27/10 12:55	012710-1	940174
7439-96-5	Manganese J+,I6b	286000	ug/Kg	*N	226	1130	1130	1	P	HSC	01/27/10 12:55	012710-1	940174
7439-97-6	Mercury	6.32	ug/kg	J	4.48	13.2	13.2	1	AV	JXL1	01/28/10 09:53	012810S1-4	943287
7440-02-0	Nickel	6.08	mg/kg	*N	0.115	0.461	0.461	2	MS	BAJ	01/16/10 01:28	100115-3	940132
7440-09-7	Potassium J+,I6b	1220000	ug/Kg	N	7230	28300	28300	1	P	HSC	01/27/10 12:55	012710-1	940174
7782-49-2	Selenium	1.15	mg/kg	U	0.576	1.15	1.15	2	MS	BAJ	01/16/10 01:28	100115-3	940132
7440-22-4	Silver	565	ug/Kg	U	113	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-23-5	Sodium J+,I6b	170000	ug/Kg	N	7910	28300	28300	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-28-0	Thallium	0.126	mg/kg	J	0.0691	0.23	0.23	2	MS	SKJ	01/19/10 22:32	100119-2	940132
7440-61-1	Uranium J,I10a	0.798	mg/kg	*	0.0152	0.0461	0.0461	2	MS	BAJ	01/16/10 01:28	100115-3	940132
7440-62-2	Vanadium	16100	ug/Kg		113	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-66-6	Zinc	35000	ug/Kg		373	1130	1130	1	P	HSC	01/27/10 12:55	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.518	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.528	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.544	g	30	mL	01/27/10	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228001 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7709 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5440000	ug/Kg		7730	22700	22700	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-36-0	Antimony U,I4b	724	ug/Kg	J	375	1140	1140	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-38-2	Arsenic	1.75	mg/kg		0.236	1.18	1.18	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-39-3	Barium	72500	ug/Kg		114	568	568	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-41-7	Beryllium	0.780	mg/kg		0.0236	0.118	0.118	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-43-9	Cadmium	204	ug/Kg	J	114	568	568	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-70-2	Calcium J+,I6b	1670000	ug/Kg		9100	28400	28400	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-47-3	Chromium	14500	ug/Kg		171	568	568	1	P	HSC	01/29/10 19:31	012910-3	940165
7440-48-4	Cobalt	2180	ug/Kg		171	568	568	1	P	HSC	01/29/10 19:31	012910-3	940165
7440-50-8	Copper	5300	ug/Kg		341	1140	1140	1	P	HSC	01/29/10 19:31	012910-3	940165
7439-89-6	Iron	11700000	ug/Kg		9100	28400	28400	1	P	HSC	01/27/10 09:55	012710-1	940165
7439-92-1	Lead J,I10a	11000	ug/Kg		284	1140	1140	1	P	HSC	01/27/10 09:55	012710-1	940165
7439-95-4	Magnesium J+,I6b	1190000	ug/Kg		9660	34100	34100	1	P	HSC	01/27/10 09:55	012710-1	940165
7439-96-5	Manganese	330000	ug/Kg		227	1140	1140	1	P	HSC	01/27/10 09:55	012710-1	940165
7439-97-6	Mercury	9.69	ug/kg	J	4.74	13.9	13.9	1	AV	JXL1	01/28/10 09:58	012810S1-5	943278
7440-02-0	Nickel	5.89	mg/kg		0.118	0.472	0.472	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-09-7	Potassium J+,I6b	958000	ug/Kg		7280	28400	28400	1	P	HSC	01/27/10 09:55	012710-1	940165
7782-49-2	Selenium	1.18	mg/kg	U	0.59	1.18	1.18	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-22-4	Silver	568	ug/Kg	U	114	568	568	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-23-5	Sodium	72400	ug/Kg		7960	28400	28400	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-28-0	Thallium	0.124	mg/kg	J	0.0708	0.236	0.236	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-61-1	Uranium	19.1	mg/kg		0.0156	0.0472	0.0472	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-62-2	Vanadium	11000	ug/Kg		114	568	568	1	P	HSC	01/29/10 19:31	012910-3	940165
7440-66-6	Zinc	47000	ug/Kg		375	1140	1140	1	P	HSC	01/27/10 09:55	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.503	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.522	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.511	g	30	mL	01/27/10	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228002 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7711 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4640000	ug/Kg		8190	24100	24100	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-36-0	Antimony	1200	ug/Kg	U	398	1200	1200	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-38-2	Arsenic	1.91	mg/kg		0.241	1.2	1.2	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-39-3	Barium	56300	ug/Kg		120	602	602	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-41-7	Beryllium	0.668	mg/kg		0.0241	0.12	0.12	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-43-9	Cadmium	194	ug/Kg	J	120	602	602	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-70-2	Calcium J+,I6b	1360000	ug/Kg		9640	30100	30100	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-47-3	Chromium	11300	ug/Kg		181	602	602	1	P	HSC	01/29/10 19:38	012910-3	940165
7440-48-4	Cobalt	1800	ug/Kg		181	602	602	1	P	HSC	01/29/10 19:38	012910-3	940165
7440-50-8	Copper	5360	ug/Kg		361	1200	1200	1	P	HSC	01/29/10 19:38	012910-3	940165
7439-89-6	Iron	10500000	ug/Kg		9640	30100	30100	1	P	HSC	01/27/10 09:59	012710-1	940165
7439-92-1	Lead J,I10a	9350	ug/Kg		301	1200	1200	1	P	HSC	01/27/10 09:59	012710-1	940165
7439-95-4	Magnesium J+,I6b	984000	ug/Kg		10200	36100	36100	1	P	HSC	01/27/10 09:59	012710-1	940165
7439-96-5	Manganese	318000	ug/Kg		241	1200	1200	1	P	HSC	01/27/10 09:59	012710-1	940165
7439-97-6	Mercury	8.65	ug/kg	J	4.14	12.2	12.2	1	AV	JXL1	01/28/10 10:00	012810S1-5	943278
7440-02-0	Nickel	5.14	mg/kg		0.12	0.482	0.482	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-09-7	Potassium J+,I6b	802000	ug/Kg		7710	30100	30100	1	P	HSC	01/27/10 09:59	012710-1	940165
7782-49-2	Selenium	1.2	mg/kg	U	0.602	1.2	1.2	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-22-4	Silver	602	ug/Kg	U	120	602	602	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-23-5	Sodium	79200	ug/Kg		8430	30100	30100	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-28-0	Thallium	0.106	mg/kg	J	0.0723	0.241	0.241	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-61-1	Uranium	5.41	mg/kg		0.0159	0.0482	0.0482	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-62-2	Vanadium	9150	ug/Kg		120	602	602	1	P	HSC	01/29/10 19:38	012910-3	940165
7440-66-6	Zinc	42200	ug/Kg		398	1200	1200	1	P	HSC	01/27/10 09:59	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.599	g	30	mL	01/27/10	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228003 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7712 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3820000	ug/Kg		7290	21400	21400	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-36-0	Antimony U,I4b	372	ug/Kg	J	354	1070	1070	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-38-2	Arsenic	0.997	mg/kg	J	0.221	1.11	1.11	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-39-3	Barium	28700	ug/Kg		107	536	536	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-41-7	Beryllium	0.877	mg/kg		0.0221	0.111	0.111	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-43-9	Cadmium	188	ug/Kg	J	107	536	536	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-70-2	Calcium J+,I6b	772000	ug/Kg		8580	26800	26800	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-47-3	Chromium	11100	ug/Kg		161	536	536	1	P	HSC	01/29/10 19:45	012910-3	940165
7440-48-4	Cobalt	801	ug/Kg		161	536	536	1	P	HSC	01/29/10 19:45	012910-3	940165
7440-50-8	Copper	3630	ug/Kg		322	1070	1070	1	P	HSC	01/29/10 19:45	012910-3	940165
7439-89-6	Iron	10600000	ug/Kg		8580	26800	26800	1	P	HSC	01/27/10 10:10	012710-1	940165
7439-92-1	Lead J,I10a	3450	ug/Kg		268	1070	1070	1	P	HSC	01/27/10 10:10	012710-1	940165
7439-95-4	Magnesium J+,I6b	627000	ug/Kg		9110	32200	32200	1	P	HSC	01/27/10 10:10	012710-1	940165
7439-96-5	Manganese	280000	ug/Kg		214	1070	1070	1	P	HSC	01/27/10 10:10	012710-1	940165
7439-97-6	Mercury	12.9	ug/kg		4.26	12.5	12.5	1	AV	JXL1	01/28/10 10:02	012810S1-5	943278
7440-02-0	Nickel	4.21	mg/kg		0.111	0.442	0.442	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-09-7	Potassium J+,I6b	473000	ug/Kg		6860	26800	26800	1	P	HSC	01/27/10 10:10	012710-1	940165
7782-49-2	Selenium	1.11	mg/kg	U	0.553	1.11	1.11	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-22-4	Silver	536	ug/Kg	U	107	536	536	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-23-5	Sodium	128000	ug/Kg		7510	26800	26800	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-28-0	Thallium	0.221	mg/kg	U	0.0664	0.221	0.221	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-61-1	Uranium	0.728	mg/kg		0.0146	0.0442	0.0442	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-62-2	Vanadium	5890	ug/Kg		107	536	536	1	P	HSC	01/29/10 19:45	012910-3	940165
7440-66-6	Zinc	44300	ug/Kg		354	1070	1070	1	P	HSC	01/27/10 10:10	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.521	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.535	g	30	mL	01/27/10	TXB3

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228004 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7716 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 95.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4040000	ug/Kg		6790	20000	20000	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-36-0	Antimony	999	ug/Kg	U	330	999	999	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-38-2	Arsenic	1.64	mg/kg		0.205	1.02	1.02	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-39-3	Barium	44800	ug/Kg		99.9	500	500	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-41-7	Beryllium	0.490	mg/kg		0.0205	0.102	0.102	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-43-9	Cadmium	275	ug/Kg	J	99.9	500	500	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-70-2	Calcium J+,I6b	1280000	ug/Kg		7990	25000	25000	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-47-3	Chromium	9150	ug/Kg		150	500	500	1	P	HSC	01/29/10 19:52	012910-3	940165
7440-48-4	Cobalt	3370	ug/Kg		749	2500	2500	5	P	HSC	01/29/10 19:59	012910-3	940165
7440-50-8	Copper	3640	ug/Kg		300	999	999	1	P	HSC	01/29/10 19:52	012910-3	940165
7439-89-6	Iron	22100000	ug/Kg		7990	25000	25000	1	P	HSC	01/27/10 10:13	012710-1	940165
7439-92-1	Lead J,I10a	8300	ug/Kg		250	999	999	1	P	HSC	01/27/10 10:13	012710-1	940165
7439-95-4	Magnesium J+,I6b	956000	ug/Kg		8490	30000	30000	1	P	HSC	01/27/10 10:13	012710-1	940165
7439-96-5	Manganese	417000	ug/Kg		200	999	999	1	P	HSC	01/27/10 10:13	012710-1	940165
7439-97-6	Mercury	6.53	ug/kg	J	3.83	11.3	11.3	1	AV	JXL1	01/28/10 10:03	012810S1-5	943278
7440-02-0	Nickel	3.45	mg/kg		0.102	0.41	0.41	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-09-7	Potassium J+,I6b	776000	ug/Kg		6390	25000	25000	1	P	HSC	01/27/10 10:13	012710-1	940165
7782-49-2	Selenium	1.02	mg/kg	U	0.512	1.02	1.02	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-22-4	Silver	500	ug/Kg	U	99.9	500	500	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-23-5	Sodium	81900	ug/Kg		6990	25000	25000	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-28-0	Thallium	0.0816	mg/kg	J	0.0615	0.205	0.205	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-61-1	Uranium	0.551	mg/kg		0.0135	0.041	0.041	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-62-2	Vanadium	23200	ug/Kg		99.9	500	500	1	P	HSC	01/29/10 19:52	012910-3	940165
7440-66-6	Zinc	85600	ug/Kg		330	999	999	1	P	HSC	01/27/10 10:13	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.512	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.525	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.559	g	30	mL	01/27/10	TXB3

LMF
2/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228005 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7718 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2950000	ug/Kg		7590	22300	22300	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-36-0	Antimony	1120	ug/Kg	U	368	1120	1120	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-38-2	Arsenic	2.19	mg/kg		0.223	1.11	1.11	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-39-3	Barium	26000	ug/Kg		112	558	558	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-41-7	Beryllium	0.477	mg/kg		0.0223	0.111	0.111	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-43-9	Cadmium	558	ug/Kg	U	112	558	558	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-70-2	Calcium J+,I6b	637000	ug/Kg		8930	27900	27900	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-47-3	Chromium	32100	ug/Kg		167	558	558	1	P	HSC	01/29/10 20:06	012910-3	940165
7440-48-4	Cobalt	915	ug/Kg		167	558	558	1	P	HSC	01/29/10 20:06	012910-3	940165
7440-50-8	Copper	3110	ug/Kg		335	1120	1120	1	P	HSC	01/29/10 20:06	012910-3	940165
7439-89-6	Iron	8440000	ug/Kg		8930	27900	27900	1	P	HSC	01/27/10 10:17	012710-1	940165
7439-92-1	Lead J,I10a	4480	ug/Kg		279	1120	1120	1	P	HSC	01/27/10 10:17	012710-1	940165
7439-95-4	Magnesium J+,I6b	442000	ug/Kg		9490	33500	33500	1	P	HSC	01/27/10 10:17	012710-1	940165
7439-96-5	Manganese	179000	ug/Kg		223	1120	1120	1	P	HSC	01/27/10 10:17	012710-1	940165
7439-97-6	Mercury	8.29	ug/kg	J	4.51	13.3	13.3	1	AV	JXL1	01/28/10 10:05	012810S1-5	943278
7440-02-0	Nickel	5.14	mg/kg		0.111	0.446	0.446	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-09-7	Potassium J+,I6b	434000	ug/Kg		7140	27900	27900	1	P	HSC	01/27/10 10:17	012710-1	940165
7782-49-2	Selenium	1.11	mg/kg	U	0.557	1.11	1.11	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-22-4	Silver	558	ug/Kg	U	112	558	558	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-23-5	Sodium	136000	ug/Kg		7810	27900	27900	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-28-0	Thallium	0.223	mg/kg	U	0.0668	0.223	0.223	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-61-1	Uranium	1.37	mg/kg		0.0147	0.0446	0.0446	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-62-2	Vanadium	5290	ug/Kg		112	558	558	1	P	HSC	01/29/10 20:06	012910-3	940165
7440-66-6	Zinc	34100	ug/Kg		368	1120	1120	1	P	HSC	01/27/10 10:17	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.516	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.515	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.52	g	30	mL	01/27/10	TXB3

LMF
2/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228006 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7713 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4600000	ug/Kg		9050	26600	26600	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-36-0	Antimony U,I4b	547	ug/Kg	J	439	1330	1330	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-38-2	Arsenic	1.94	mg/kg		0.268	1.34	1.34	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-39-3	Barium	61500	ug/Kg		133	666	666	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-41-7	Beryllium	0.609	mg/kg		0.0268	0.134	0.134	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-43-9	Cadmium	184	ug/Kg	J	133	666	666	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-70-2	Calcium J+,I6b	1390000	ug/Kg		10700	33300	33300	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-47-3	Chromium	18800	ug/Kg		200	666	666	1	P	HSC	01/29/10 20:14	012910-3	940165
7440-48-4	Cobalt	1940	ug/Kg		200	666	666	1	P	HSC	01/29/10 20:14	012910-3	940165
7440-50-8	Copper	6940	ug/Kg		399	1330	1330	1	P	HSC	01/29/10 20:14	012910-3	940165
7439-89-6	Iron	10300000	ug/Kg		10700	33300	33300	1	P	HSC	01/27/10 10:21	012710-1	940165
7439-92-1	Lead J,I10a	11700	ug/Kg		333	1330	1330	1	P	HSC	01/27/10 10:21	012710-1	940165
7439-95-4	Magnesium J+,I6b	966000	ug/Kg		11300	39900	39900	1	P	HSC	01/27/10 10:21	012710-1	940165
7439-96-5	Manganese	273000	ug/Kg		266	1330	1330	1	P	HSC	01/27/10 10:21	012710-1	940165
7439-97-6	Mercury	12.2	ug/kg	J	5.43	16	16	1	AV	JXL1	01/28/10 10:07	012810S1-5	943278
7440-02-0	Nickel	5.01	mg/kg		0.134	0.536	0.536	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-09-7	Potassium J+,I6b	808000	ug/Kg		8520	33300	33300	1	P	HSC	01/27/10 10:21	012710-1	940165
7782-49-2	Selenium	1.34	mg/kg	U	0.67	1.34	1.34	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-22-4	Silver	666	ug/Kg	U	133	666	666	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-23-5	Sodium	65700	ug/Kg		9320	33300	33300	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-28-0	Thallium	0.106	mg/kg	J	0.0804	0.268	0.268	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-61-1	Uranium	6.78	mg/kg		0.0177	0.0536	0.0536	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-62-2	Vanadium	9980	ug/Kg		133	666	666	1	P	HSC	01/29/10 20:14	012910-3	940165
7440-66-6	Zinc	41000	ug/Kg		439	1330	1330	1	P	HSC	01/27/10 10:21	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.508	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.508	g	30	mL	01/27/10	TXB3

LMF
2/17/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-1161 VALIDATION DATE: 2/17/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): Total CN

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the soil matrix QC analyses associated with all samples *except* RE12-10-7711 – -7713, -7716, and -7718 were performed on parent samples from other LANL RNs. No sample data were qualified as a result.

Reviewed by: Charissa Lewis Level: 1 Date: 2/18/10

VALIDATOR'S SIGNATURE: DATE: 2/17/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
☐	☒	☐	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1952

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
☐	☒	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
☐	☒	☐	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
☐	☒	☐	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
☐	☒	☐	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
☒	☐	☐	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 20, 2010

Client SDG: 10-1161

Client Sample ID:	RE12-10-7738	Project:	LANL01004
Sample ID:	244226001	Client ID:	LANL010
Matrix:	W		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 01/18/10	1253	940627	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	1530	940626

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LMF
2/17/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 20, 2010

Client SDG: 10-1161

Client Sample ID:	RE12-10-7737	Project:	LANL01004
Sample ID:	244226002	Client ID:	LANL010
Matrix:	W		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 01/18/10	1257	940627	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	1530	940626

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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2/17/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7719	Project:	LANL01004
Sample ID:	244227010	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	16.6%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	81.6	300	ug/kg	1	AXC2 01/18/10	1510	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LMF
2/17/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7717	Project:	LANL01004
Sample ID:	244227011	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	18.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	83.2	306	ug/kg	1	AXC2 01/18/10	1510	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7708	Project:	LANL01004
Sample ID:	244227012	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	3.21%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	63.9	235	ug/kg	1	AXC2 01/18/10	1511	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7706	Project:	LANL01004
Sample ID:	244227013	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	10.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.9	268	ug/kg	1	AXC2 01/18/10	1512	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7714	Project:	LANL01004
Sample ID:	244227014	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	9.61%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	67.2	247	ug/kg	1	AXC2 01/18/10	1513	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7705	Project:	LANL01004
Sample ID:	244227015	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	16.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	78.0	287	ug/kg	1	AXC2 01/18/10	1514	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7734	Project:	LANL01004
Sample ID:	244227001	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	6.55%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.8	268	ug/kg	1	AXC2 01/18/10	1458	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0836	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7701	Project:	LANL01004
Sample ID:	244227002	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	25.6%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	91.4	336	ug/kg	1	AXC2 01/18/10	1459	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7702	Project:	LANL01004
Sample ID:	244227003	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	15%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	80.0	294	ug/kg	1	AXC2 01/18/10	1500	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7700	Project:	LANL01004
Sample ID:	244227004	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	6.34%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.6	267	ug/kg	1	AXC2 01/18/10	1501	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7699	Project:	LANL01004
Sample ID:	244227005	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	20.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	85.5	314	ug/kg	1	AXC2 01/18/10	1501	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7727	Project:	LANL01004
Sample ID:	244227006	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	25.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	91.0	335	ug/kg	1	AXC2 01/18/10	1502	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7710	Project:	LANL01004
Sample ID:	244227007	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	6.38%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total		502	72.6	267	ug/kg	1	AXC2 01/18/10	1503	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7715	Project:	LANL01004
Sample ID:	244227008	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	26%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	91.8	338	ug/kg	1	AXC2 01/18/10	1504	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7707	Project:	LANL01004
Sample ID:	244227009	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	21.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	86.5	318	ug/kg	1	AXC2 01/18/10	1509	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7709	Project:	LANL01004
Sample ID:	244228001	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	15.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.1	265	ug/kg	1	AXC2 01/18/10	1515	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7711	Project:	LANL01004
Sample ID:	244228002	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	17.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.6	267	ug/kg	1	AXC2 01/18/10	1409	940249	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0839	940247

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7712	Project:	LANL01004
Sample ID:	244228003	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	10.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	76.0	279	ug/kg	1	AXC2 01/18/10	1412	940249	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0839	940247

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7716	Project:	LANL01004
Sample ID:	244228004	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	4.68%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.6	252	ug/kg	1	AXC2 01/18/10	1421	940249	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0839	940247

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7718	Project:	LANL01004
Sample ID:	244228005	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	13%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.8	271	ug/kg	1	AXC2 01/18/10	1422	940249	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0839	940247

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7713	Project:	LANL01004
Sample ID:	244228006	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	26.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	92.0	338	ug/kg	1	AXC2 01/18/10	1423	940249	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0839	940247

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Friday, January 08, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1161

REQUEST NUMBER: 10-1161

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 2/7/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 244226%, 244227%, 244228%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7738	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7738	1	POLY	SW-846:6850	Ice	W
RE12-10-7738	1	POLY	TCN	Sodium Hydroxide	W
RE12-10-7737	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7737	1	POLY	SW-846:6850	Ice	W
RE12-10-7737	1	POLY	TCN	Sodium Hydroxide	W
RE12-10-7734	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7701	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7702	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7700	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7699	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7727	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7710	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7715	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7707	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7719	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7717	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7708	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7706	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7714	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7705	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7709	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7711	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7712	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7716	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7718	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7713	1	POLY	Met+U+CLO4+CN	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
		1/8/10	3:00	Greg Tyler		1-9-10	0930
Printed Name	Signature			Printed Name	Signature		

Friday, January 08, 2010

REQUEST NUMBER: 10-1161

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number:10-1161
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 1/8/2010
TURNAROUND/REPORT DUE: 2/7/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:
Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	

Friday, January 08, 2010

REQUEST NUMBER: 10-1161

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	
		1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	
		1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
		1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	
	SW-846:6850	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	

Friday, January 08, 2010

REQUEST NUMBER: 10-1161

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6850	1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	
		1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
		1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	
	SW-846:7470A	1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	
	SW-846:7471A	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	
		1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	

Friday, January 08, 2010

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
	SW-846:9012A	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	
		1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	
		1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
		1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

www.gel.com

January 12, 2010

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 244226 244227 244228
SDGs: 10-1161

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 09, 2010, and analyzed for General Chemistry, Metals and Perchlorates by LCMSMS. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

for

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1161
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 244226, 244227 and 244228
SDG: 10-1161

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Miscellaneous 1143

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Miscellaneous 1655

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Quality Control Summary 1708
Instrument QC Data Summary 1711
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Case Narrative 1728
Sample Data Summary 1733
Quality Control Summary 1750
Instrument QC Data Summary 1753
Cyanide, Total 1755

General Chemistry Analysis 1769
Case Narrative 1770
Sample Data Summary 1775
Quality Control Summary 1783
Instrument QC Data Summary 1786
Cyanide, Total 1788

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 244226, 244227 and 244228
SDG # : 10-1161

January 12, 2010

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on January 09, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
244226001	RE12-10-7738
244226002	RE12-10-7737
244227001	RE12-10-7734
244227002	RE12-10-7701
244227003	RE12-10-7702
244227004	RE12-10-7700
244227005	RE12-10-7699
244227006	RE12-10-7727
244227007	RE12-10-7710
244227008	RE12-10-7715
244227009	RE12-10-7707
244227010	RE12-10-7719
244227011	RE12-10-7717
244227012	RE12-10-7708
244227013	RE12-10-7706
244227014	RE12-10-7714
244227015	RE12-10-7705
244228001	RE12-10-7709
244228002	RE12-10-7711
244228003	RE12-10-7712
244228004	RE12-10-7716
244228005	RE12-10-7718
244228006	RE12-10-7713

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry, Metals and Perchlorates by LCMSMS.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

for

Valerie Davis

Project Manager

List of current GEL Certifications as of 12 January 2010

State	Certification
Arizona	AZ0668
Arkansas	88–0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH–0169
Dept. of Navy	NFESC 413
EPA Region 5	WG–15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C–SC–01
Kansas – NELAP	E–10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M–SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68–00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235–07B–TX
U.S. Dept. of Agriculture	S–52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Friday, January 08, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1161

REQUEST NUMBER: 10-1161

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

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Relinquished By:		Date	Time	Received By:		Date	Time
		1/8/10	3:00	Greg Tyler		1-9-10	0930
Printed Name	Signature			Printed Name	Signature		

Friday, January 08, 2010

REQUEST NUMBER: 10-1161

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NATIONAL LABORATORY

ATTN: Valerie Davis

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2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number:10-1161

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 1/8/2010

TURNAROUND/REPORT DUE: 2/7/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
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		1	RE12-10-7714	R	1/6/2010	
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		1	RE12-10-7716	R	1/6/2010	
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		1	RE12-10-7734	R	1/6/2010	
		1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	
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		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
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		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
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		1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	
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		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
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		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	

Friday, January 08, 2010

REQUEST NUMBER: 10-1161

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
	SW-846:9012A	1	RE12-10-7699	R	1/6/2010	
		1	RE12-10-7700	R	1/6/2010	
		1	RE12-10-7701	R	1/6/2010	
		1	RE12-10-7702	R	1/6/2010	
		1	RE12-10-7705	R	1/6/2010	
		1	RE12-10-7706	R	1/6/2010	
		1	RE12-10-7707	R	1/6/2010	
		1	RE12-10-7708	R	1/6/2010	
		1	RE12-10-7709	R	1/6/2010	
		1	RE12-10-7710	R	1/6/2010	
		1	RE12-10-7711	R	1/6/2010	
		1	RE12-10-7712	R	1/6/2010	
		1	RE12-10-7713	R	1/6/2010	
		1	RE12-10-7714	R	1/6/2010	
		1	RE12-10-7715	R	1/6/2010	
		1	RE12-10-7716	R	1/6/2010	
		1	RE12-10-7717	R	1/6/2010	
		1	RE12-10-7718	R	1/6/2010	
		1	RE12-10-7719	R	1/6/2010	
		1	RE12-10-7727	R	1/6/2010	
		1	RE12-10-7734	R	1/6/2010	
		1	RE12-10-7737	W	1/6/2010	
		1	RE12-10-7738	W	1/6/2010	

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-1161**
Received By: Greg Tyler	**Date Received: 1/09/10**

Suspected Hazard Information	**Yes**	**No**	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: **60cpm**
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

	Sample Receipt Criteria	**Yes**	**NA**	**No**	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags **blue ice** 1-4, 6C dry ice 9, 10, 15C **none** other
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: **No time on Chain of Custody.**
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:

Fed Ex Tracking Numbers:

7209 7849 4604 1C	**7209 7849 4453 4C**	**7209 7849 4578 4C**
7209 7849 4442 1C	**7209 7849 4534 4C**	**7209 7849 4567 6C**
7209 7849 4431 2C	**7209 7849 4556 4C**	**7209 7849 4410 9C**
7209 7849 4464 2C	**7209 7849 4394 4C**	**7209 7849 4420 10C**
7209 7849 4501 3C	**7209 7849 4497 4C**	**7209 7849 4545 10C**
7209 7849 4475 3C	**7209 7849 4523 4C**	**7209 7849 4409 15C**
7209 7849 4589 3C	**7209 7849 4590 4C**	
7209 7849 4486 3C	**7209 7849 4512 4C**	

PM (or PMA) review: Initials _____ Date 1/11/10

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 66.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0352VA00

1C

FedEx Express

2 of 2
MPS# 0263 7209 7849 4604
Mstr# 7209 7849 4590 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 50
CAD: 0014176
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
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REF: 6B010AMR1A015AGWF0

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1 of 3
TRK# 0201 7209 7849 4442
MASTER

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 49.0
ACTWGT: 49.0
CAD: 0014176A
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
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CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BYD0

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3 of 3
MPS# 0263 7209 7849 4431
Mstr# 7209 7849 4410 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGWF0

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3 of 3
MPS# 0263 7209 7849 4464
Mstr# 7209 7849 4442 0201

SATURDAY ### A1
PRIORITY OVERNIGH

2940
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X0 CHSA

LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2449

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2040 SAVAGE RD

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1 of 2

SATURDAY ### A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7849 4501

MASTER

X0 CHSA

29407
SC-US
CHS

Part # 156148-434 NRT V3.04-0

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2449

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SATURDAY ### A1
PRIORITY OVERNIGHT

MPS# 0263 7209 7849 4589
Mstr# 7209 7849 4578 0201

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29407
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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(843) 556-8171
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1 of 3

SATURDAY ### A
PRIORITY OVERNIGH

TRK# 0201 7209 7849 4475

MASTER

X0 CHSA

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Part # 156148-434 NRT V3.04-0

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGWF0

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2 of 3

SATURDAY ### A
PRIORITY OVERNIGH

MPS# 0263 7209 7849 4486
Mstr# 7209 7849 4475 0201

X0 CHSA

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2449

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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REF: 6B010AMR1A015AGWF0

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SATURDAY
PRIORITY OVERN

2 of 3
MPS# 0263 7209 7849 4453
Mstr# 7209 7849 4442 0201

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X0 CHSA

156148-434 NAIT V3 04-0

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

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SATURDAY ### A1
PRIORITY OVERNIGHT

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MPS# 0263 7209 7849 4534
Mstr# 7209 7849 4523 0201

29407
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156148-434 NAIT V3 04-

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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NAIT V3 04-0

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REF: 6B010AMR2A05158Y00

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SATURDAY ### A1
PRIORITY OVERNIGHT

2 of 3
MPS# 0263 7209 7849 4394
Mstr# 7209 7849 4383 0201

29407
SC-US
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NAIT V3 04-0

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN1
ACTWGT: 47.0 LB M
CAD: 0014176/CAFE

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGWF0

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3 of 3
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PRIORITY OVERNIG
Mstr# 7209 7849 4475 0201

X0 CHSA

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Part # 156148-434 NRIT V3 04-0

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

4°

CHARLESTON SC 29407
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REF: 6B010AMR1A015AGWF0

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1 of 2
SATURDAY ### A1
TRK# 0201 7209 7849 4523
PRIORITY OVERNIGHT
MASTER

X0 CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 04-0

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0352VA00

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1 of 2
SATURDAY ### A1
TRK# 0201 7209 7849 4590
PRIORITY OVERNIGHT
MASTER

X0 CHSA

29407
SC-US
CHS

JOYLENE
LOS ALAMOS NATL
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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REF: 6B010AMR1A015AGWF0

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SATURDAY ### A1
2 of 2
PRIORITY OVERNIGHT
MPS# 0263 7209 7849 4512
Mstr# 7209 7849 4501 0201

29407
SC-US
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TA00 BLDG 1237 DPU 03
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1 of 2
TRK# 0201 7209 7849 4578
MASTER

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0352VA00

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2 of 2
MPS# 0263 7209 7849 4567
Mstr# 7209 7849 4556 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 45.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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2040 SAVAGE RD

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(843) 556-8171
REF: 6B010AMR2A0515BYD0

9°

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1 of 3
TRK# 0201 7209 7849 4410
MASTER

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

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2040 SAVAGE RD

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(843) 556-8171
REF: 6B010AMR2A0515BYD0

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FedEx Express

2 of 3
MPS# 0263 7209 7849 4420
Mstr# 7209 7849 4410 0201

SATURDAY ### A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

X0 CHSA

ORIGIN ID: SAFA (505) 665-9988
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 08JAN10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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2040 SAVAGE RD

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(843) 556-8171
REF: 6B010AMR3A05529E00

10

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SATURDAY ### A1
PRIORITY OVERNIGHT

TRK# 0201 7209 7849 4545

X0 CHSA

29407
SC-US
CHS

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BY00

15c

FedEx Express

3 of 3

SATURDAY ### A1
PRIORITY OVERNIGHT

MPS# 0283 7209 7849 4409
Mstr# 7209 7849 4383 0201

X0 CHSA

29407
SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

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LC/MS/MS PERCHLORATE ANALYSIS

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1161

Method/Analysis Information

Procedure:	**Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**
Analytical Method:	SW846 6850 Modified
Prep Method:	SW846 6850 Modified
Analytical Batch Number:	940158
Prep Batch Number:	940153

Sample Analysis

Sample ID	Client ID
244226001	RE12-10-7738
244226002	RE12-10-7737
1202011858	Interference Check Sample (ICS)
1202011852	Method Blank (MB)
1202011853	Laboratory Control Sample (LCS)
1202011854	244226001(RE12-10-7738) Matrix Spike (MS)
1202011855	244226001(RE12-10-7738) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

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CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 244226001 (RE12-10-7738) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

Retention Time
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

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Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Samples 1202011854 (RE12-10-7738MS), 1202011855 (RE12-10-7738MSD), 244226001 (RE12-10-7738) and 244226002 (RE12-10-7737) were re-analyzed due to a CVS failing acceptance criteria. The reanalysis passed acceptance criteria and is reported.

Miscellaneous Information

Data Exception (DER) Documentation
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The samples in this SDG were not originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

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System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Herbert M. Maier **Date:** 01/21/10

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 940153

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7738

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161

GEL Sample ID: 244226001

Date Filtered: 13-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:15	per0118015a
	Perchlorate Isotope Ratio						1	18-JAN-10 19:15	per0118015a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:15	per0118015a
	Perchlorate-O(18)			0.490	ug/L		1	18-JAN-10 19:15	per0118015a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 940153

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7737

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161

GEL Sample ID: 244226002

Date Filtered: 13-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:41	per0118018a
	Perchlorate Isotope Ratio						1	18-JAN-10 19:41	per0118018a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:41	per0118018a
	Perchlorate-O(18)			0.487	ug/L		1	18-JAN-10 19:41	per0118018a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1161

Extract Batch Code: 940153

Date Filtered: 13–JAN–10

Matrix: WATER

Sample ID: 1202011853

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.192	ug/L	95.9		85 – 115
Perchlorate Isotope Ratio		3				–
Perchlorate–101	0.200	.198	ug/L	98.9		85 – 115
Perchlorate–O(18)		.48	ug/L			–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1161

Extract Batch Code: 940153

Date Filtered: 13–JAN–10

Matrix: GROUND WATER

Sample ID: 1202011858

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.202	ug/L	101		70 – 130
Perchlorate Isotope Ratio		3.14				
Perchlorate–101	0.200	.198	ug/L	99.2		70 – 130
Perchlorate–O(18)		.505	ug/L			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

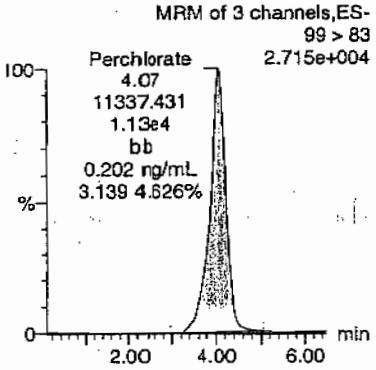
Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Name: per0115030a
Date: 15-Jan-2010
Time: 21:31:30
ID: 1202011858
Vial: 1:5,C

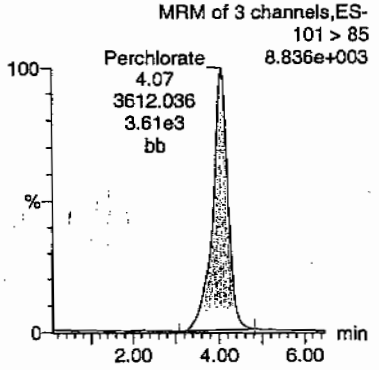
|LANL|940158|LZQ|ICS|1|

GWW 01-18-10

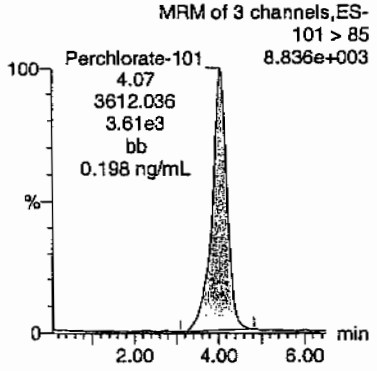
Perchlorate



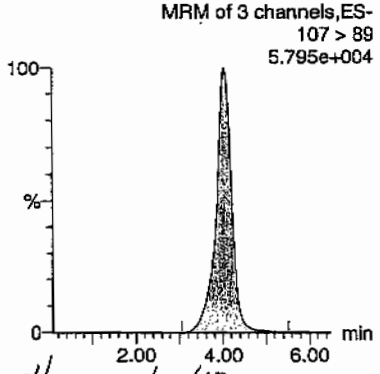
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202011858	Perchlorate	99 > 83	4.07	11337.431	11337.431	bb			0.2015	100.77	0.77	2258.4...	3.14
202011858	Perchlorate-101	101 > 85	4.07	3612.036	3612.036	bb			0.1984	99.21	-0.79	672.606	
202011858	Perchlorate-O(18)	107 > 89	4.05	24359.219	24359.219	bb			0.5051	101.02	1.02	3657.5...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–1161

Extract Batch Code: 940153

Date Extracted: 13–JAN–10

GEL MS/PS ID: 1202011854

Client ID: RE12–10–7738

GEL MSD/PSD ID: 1202011855

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	0.200	0.00164	ug/L	0.192	95.1	.198	98.2	3.13	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3		2.96		0		–
Perchlorate–101	0.200	0.000696	ug/L	0.194	96.8	.203	101	4.35	30	75 – 125
Perchlorate–O(18)	0	0.490	ug/L	0.489		.496		1.49		–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1161

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	15–JAN–10	per0115001a	IPB001
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115001a	IPB001
Perchlorate	0.00	0	NA	15–JAN–10	per0115002a	IPB001
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115002a	IPB001
Perchlorate	0.00	0	NA	18–JAN–10	per0118001a	IPB001
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118001a	IPB001
Perchlorate	0.00	0	NA	18–JAN–10	per0118002a	IPB001
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118002a	IPB001

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per011510a.mdb 18 Jan 2010 08:43:34
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011510a.cdb 18 Jan 2010 08:43:48

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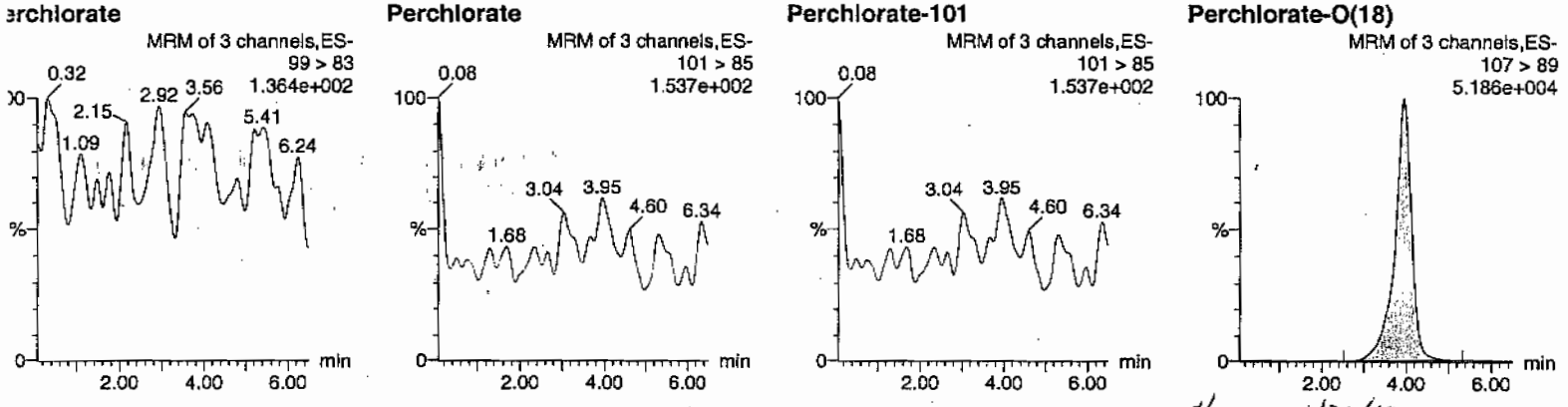
ate: 15-Jan-2010
me: 16:54:54
: IPB001
al: 1:1,A

CWW 01-18-10



Hmc 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3001	Perchlorate	99 > 83											0.00
3001	Perchlorate-101	101 > 85											
3001	Perchlorate-O(18)	107 > 89	3.97	24245.881	24245.881	bb			0.5027	100.55	0.55	1380.2...	

:L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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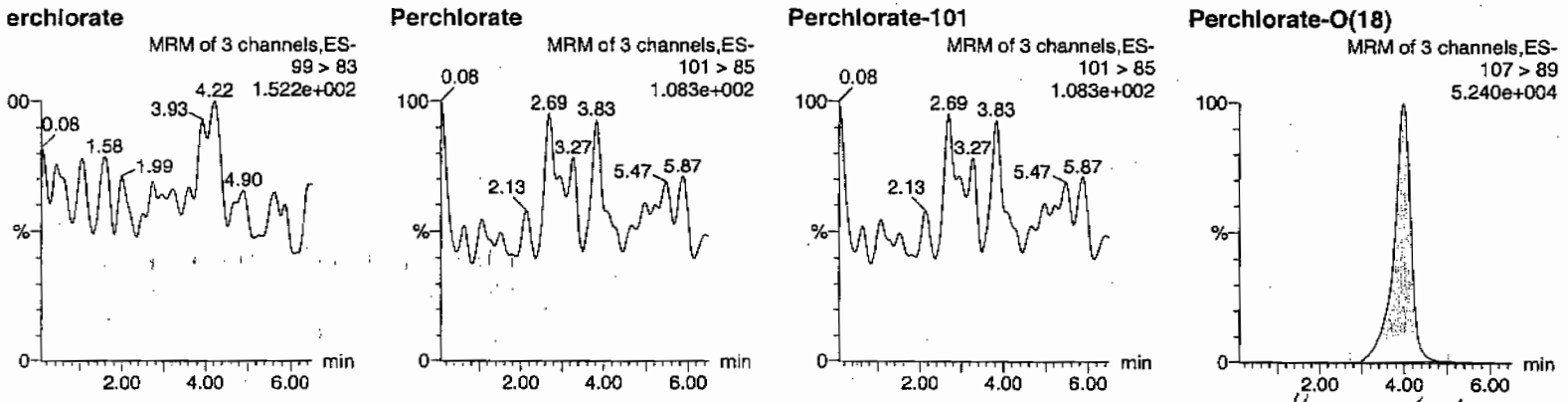
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Name: per0115002a
Date: 15-Jan-2010
Time: 17:04:26
ID: IPB001
Vial: 1:1,A

CW 01-18-10



tmw 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B001	Perchlorate	99 > 83											0.00
B001	Perchlorate-101	101 > 85											
B001	Perchlorate-O(18)	107 > 89	3.98	24126.238	24126.238	bb			0.5002	100.05	0.05	2526.4...	

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

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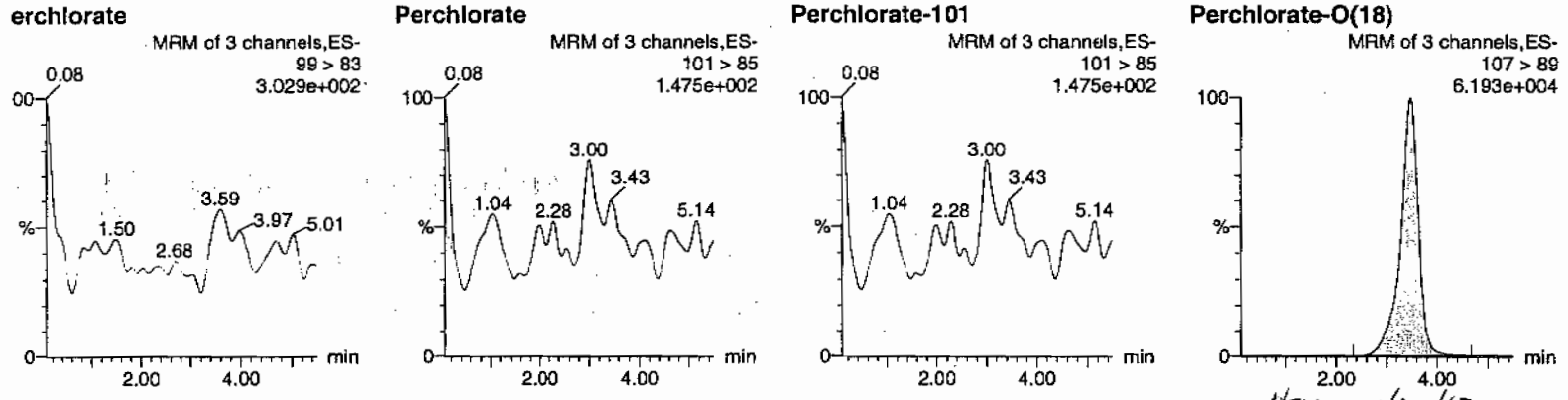
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011810a.cdb 19 Jan 2010 07:54:38

ame: per0118001a
ate: 18-Jan-2010
ime: 17:15:12
): IPB001
ial: 1:1,A

CWW
01-19-10



Hnm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB001	Perchlorate	99 > 83											0.00
PB001	Perchlorate-101	101 > 85											
PB001	Perchlorate-O(18)	107 > 89	3.47	25658.814	25658.814	bb			0.5125	102.50	2.50	360.946	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

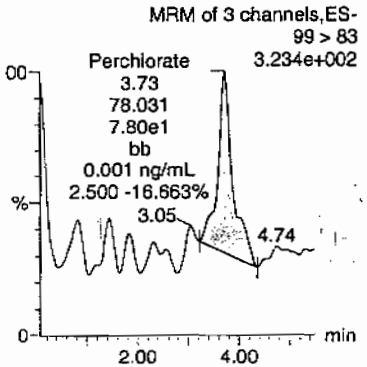
Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

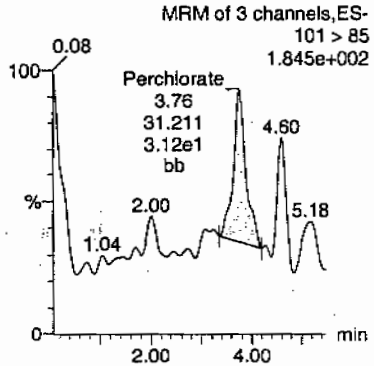
Name: per0118002a
Date: 18-Jan-2010
Time: 17:23:45
ID: IPB001
Vial: 1:1,A

CWW
01-19-10

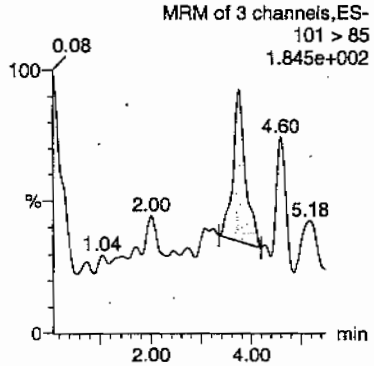
Perchlorate



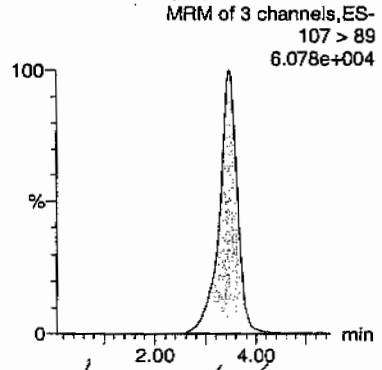
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Anne 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B001	Perchlorate	99 > 83	3.73	78.031	78.031	bb			0.0013			10.085	2.50
'B001	Perchlorate-101	101 > 85	3.76	31.211	31.211	bb			0.0016			11.802	
'B001	Perchlorate-O(18)	107 > 89	3.47	25199.514	25199.514	bb			0.5033	100.66	0.66	2725.7...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1161

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	15–JAN–10	per0115008a	IPB002
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115008a	IPB002
Perchlorate	0.00	0	NA	15–JAN–10	per0115010a	IPB003
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115010a	IPB003
Perchlorate	0.00	0	NA	15–JAN–10	per0115017a	IPB004
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115017a	IPB004
Perchlorate	0.00	0	NA	15–JAN–10	per0115026a	IPB005
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115026a	IPB005
Perchlorate	0.00	0	NA	15–JAN–10	per0115039a	IPB006
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115039a	IPB006
Perchlorate	0.00	0	NA	18–JAN–10	per0118008a	IPB002
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118008a	IPB002
Perchlorate	0.00	0	NA	18–JAN–10	per0118010a	IPB003

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1161

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118010a	IPB003
Perchlorate	0.00	0	NA	18–JAN–10	per0118022a	IPB004
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118022a	IPB004

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

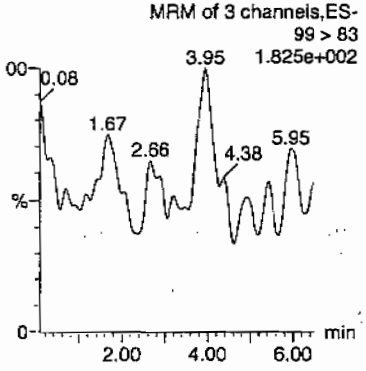
Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

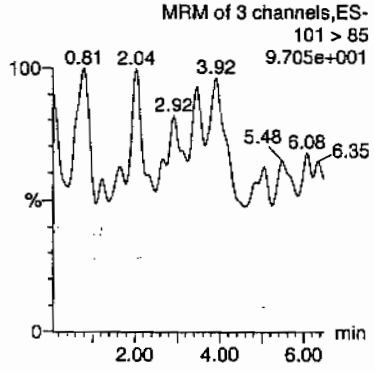
Name: per0115008a
Date: 15-Jan-2010
Time: 18:01:34
ID: IPB002
Vial: 1:1,A

CW 01-18-10

Perchlorate



Perchlorate



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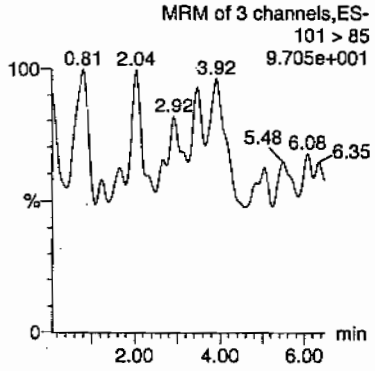
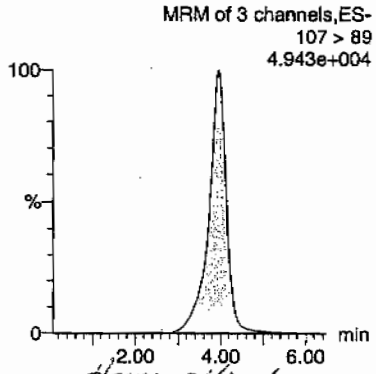


Perchlorate-O(18)



Time 01/26/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B002	Perchlorate	99 > 83											0.00
'B002	Perchlorate-101	101 > 85											
'B002	Perchlorate-O(18)	107 > 89	3.95	23728.619	23728.619	bb			0.4920	98.40	-1.60	1073.2...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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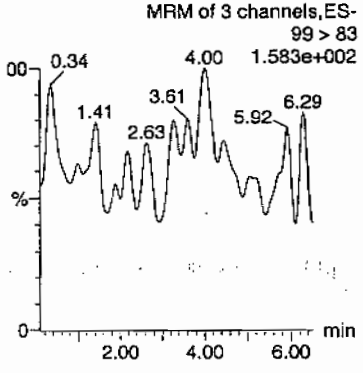
ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

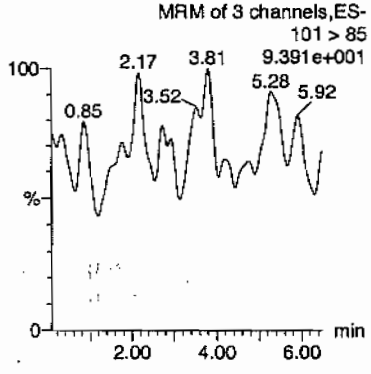
ame: per0115010a
ate: 15-Jan-2010
ime: 18:20:39
): IPB003
ial: 1:1,A

01-18-10

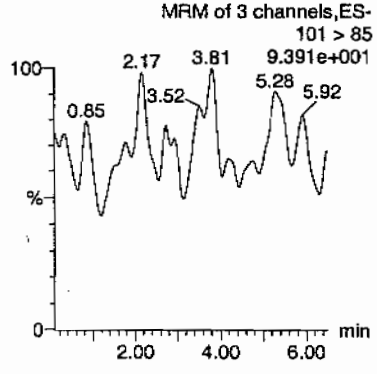
erchlorate



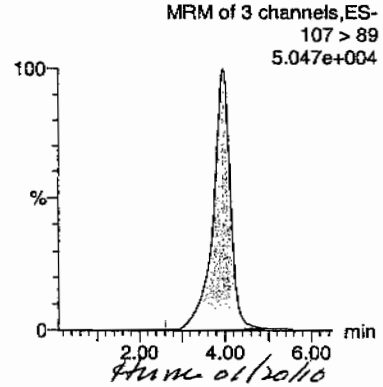
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hum 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B003	Perchlorate	99 > 83											0.00
'B003	Perchlorate-101	101 > 85											
'B003	Perchlorate-O(18)	107 > 89	3.95	23370.221	23370.221	bb			0.4846	96.91	-3.09	2094.0...	

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uantify Sample Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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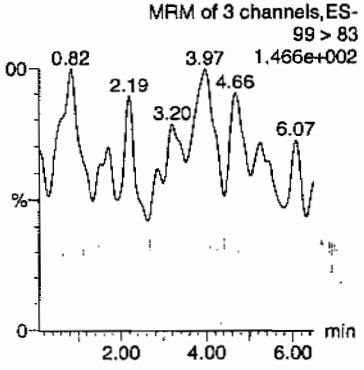
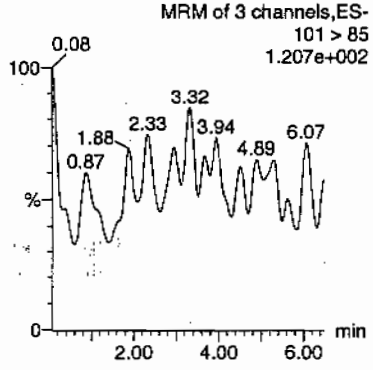
ate: 15-Jan-2010
ime: 19:27:27
): IPB004
ial: 1:1,A

CWW
01-18-10

erchlorate



Perchlorate



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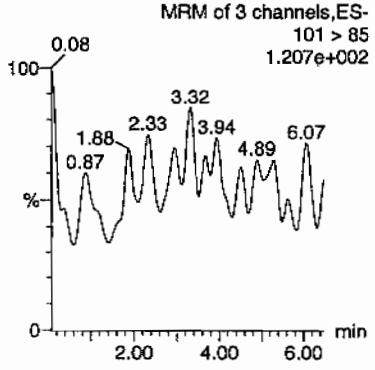
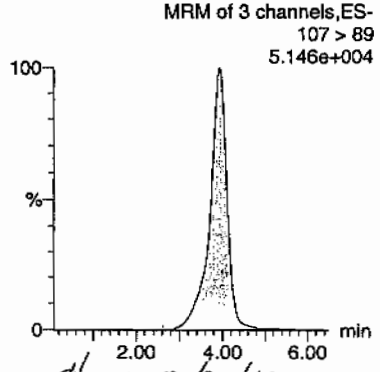


Perchlorate-O(18)



dhmc 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B004	Perchlorate	99 > 83											0.00
'B004	Perchlorate-101	101 > 85											
'B004	Perchlorate-O(18)	107 > 89	3.93	23882.883	23882.883	bb			0.4952	99.04	-0.96	4428.4...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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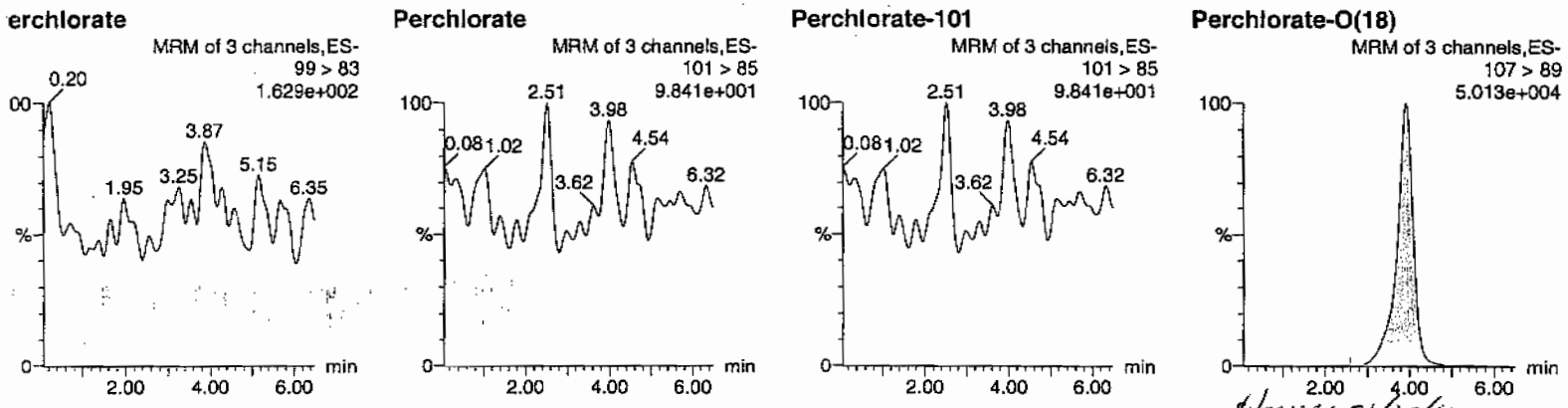
)uantify Sample Report MassLynx 4.0 SP4
'he GEL Group, LLC Analyst: Charlers W. Wilson

)ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
'rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

lame: per0115026a
)ate: 15-Jan-2010
ime: 20:53:19
): IPB005
'ial: 1:1,A

cw
01-18-10



Hmm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B005	Perchlorate	99 > 83											0.00
'B005	Perchlorate-101	101 > 85											
'B005	Perchlorate-O(18)	107 > 89	3.92	23051.479	23051.479	bb			0.4780	95.59	-4.41	581.734	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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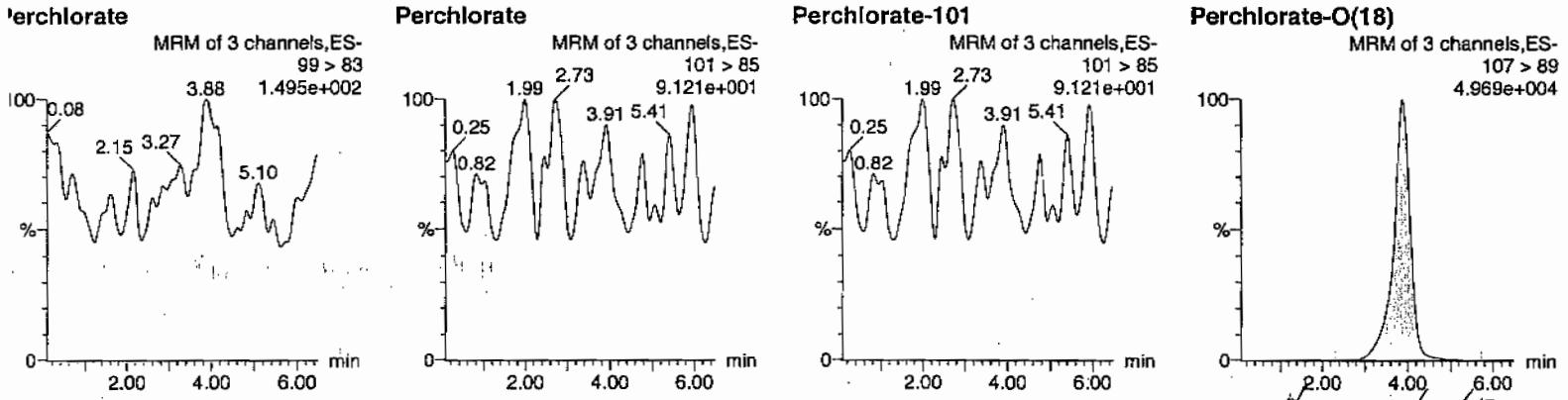
Date: 15-Jan-2010
Time: 22:57:27
ID: IPB006
Vial: 1:1,A

aw 01-18-10



HMW 01/20/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83											0.00
IPB006	Perchlorate-101	101 > 85											
IPB006	Perchlorate-O(18)	107 > 89	3.89	22828.760	22828.760	bb			0.4733	94.67	-5.33	3583.8...	

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118008a
Date: 18-Jan-2010
Time: 18:15:15
ID: IPB002
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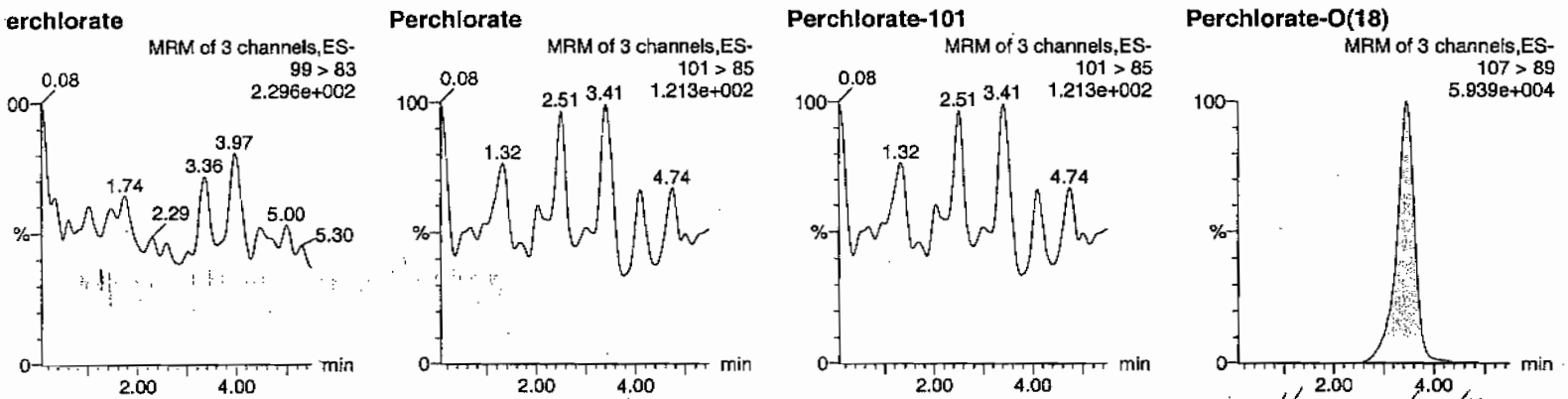
CWW
01-19-10



HMW 01/20/10

I.	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B002	Perchlorate	99 > 83											0.00
B002	Perchlorate-101	101 > 85											
B002	Perchlorate-O(18)	107 > 89	3.47	24661.912	24661.912	bb			0.4926	98.52	-1.48	1912.5...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

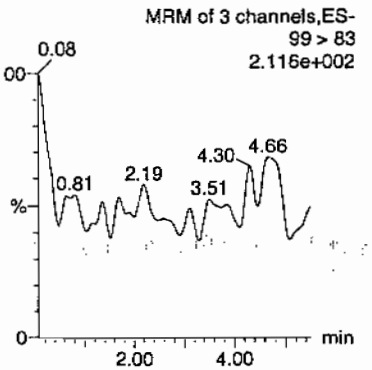
ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

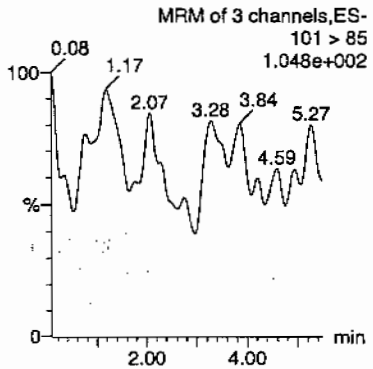
ame: per0118010a
ate: 18-Jan-2010
ime: 18:32:35
): IPB003
ial: 1:1,A

CWW
01-19-10

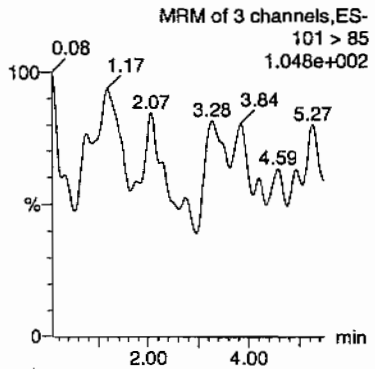
erchlorate



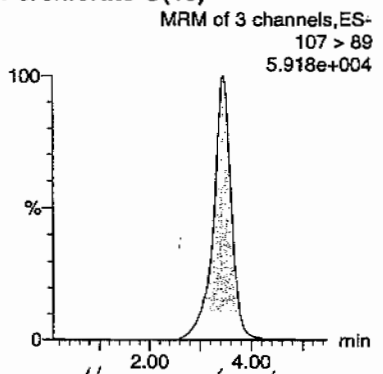
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmw 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB003	Perchlorate	99 > 83											0.00
PB003	Perchlorate-101	101 > 85											
PB003	Perchlorate-O(18)	107 > 89	3.46	24207.375	24207.375	bb			0.4835	96.70	-3.30	3975.1...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

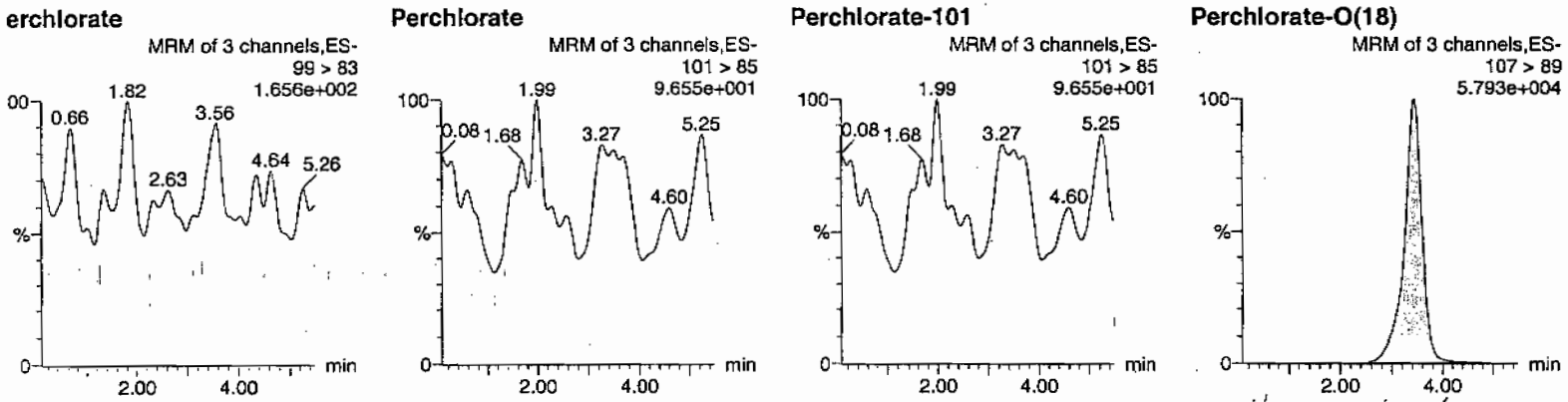
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118022a
Date: 18-Jan-2010
Time: 20:15:28
ID: IPB004
Vial: 1:1,A

CWW 01-19-10



HMK 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B004	Perchlorate	99 > 83											0.00
B004	Perchlorate-101	101 > 85											
B004	Perchlorate-O(18)	107 > 89	3.45	23594.861	23594.861	bb			0.4713	94.25	-5.75	7510.4...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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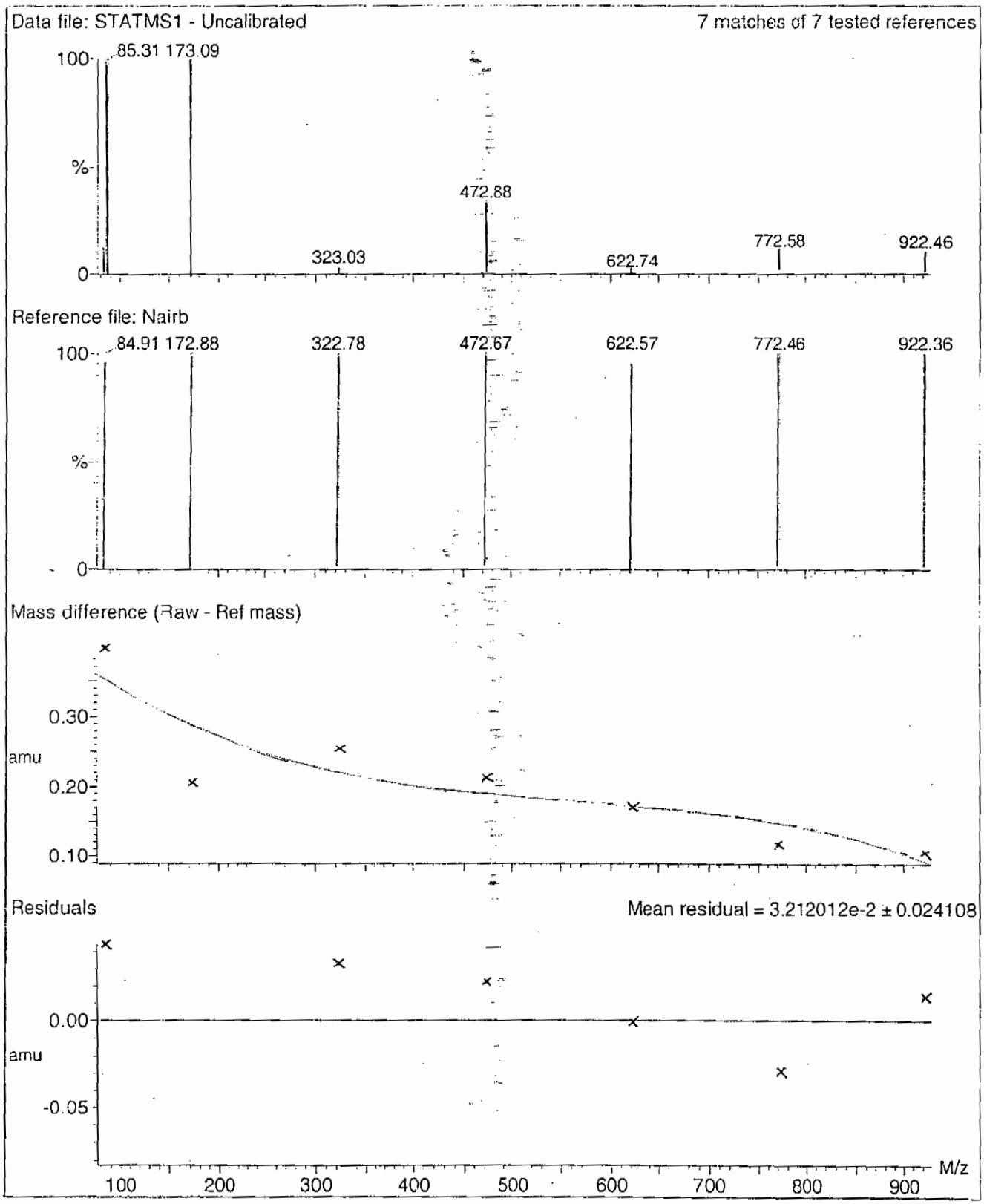
QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

POINTS HIGHLIGHTED BY CURSOR 01-09-08



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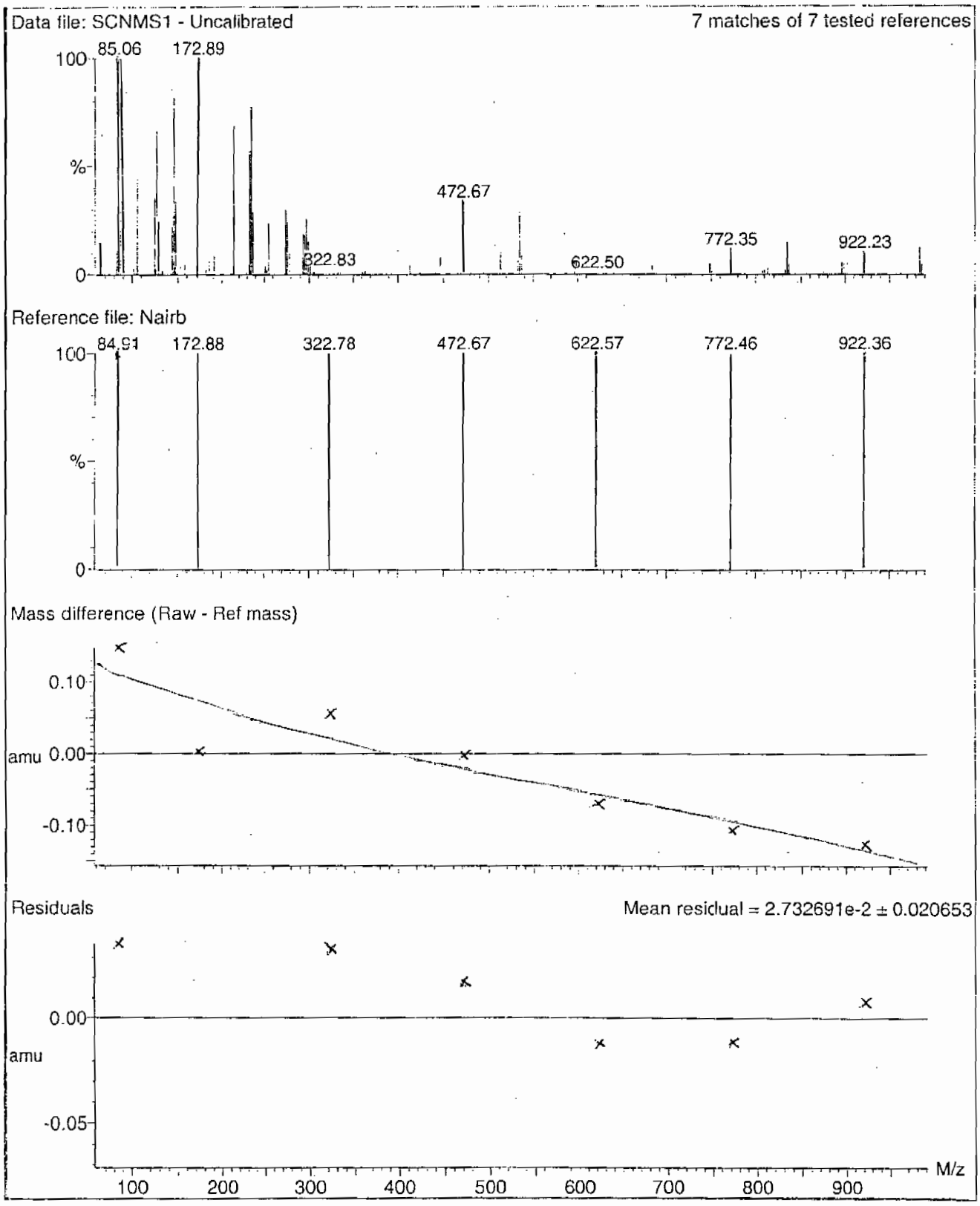
Calibration Report - MS1 Scanning

Printed: Tue Jan 08 12:20:09 2008



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Calibration Report - MS1 Scan Speed Compensation

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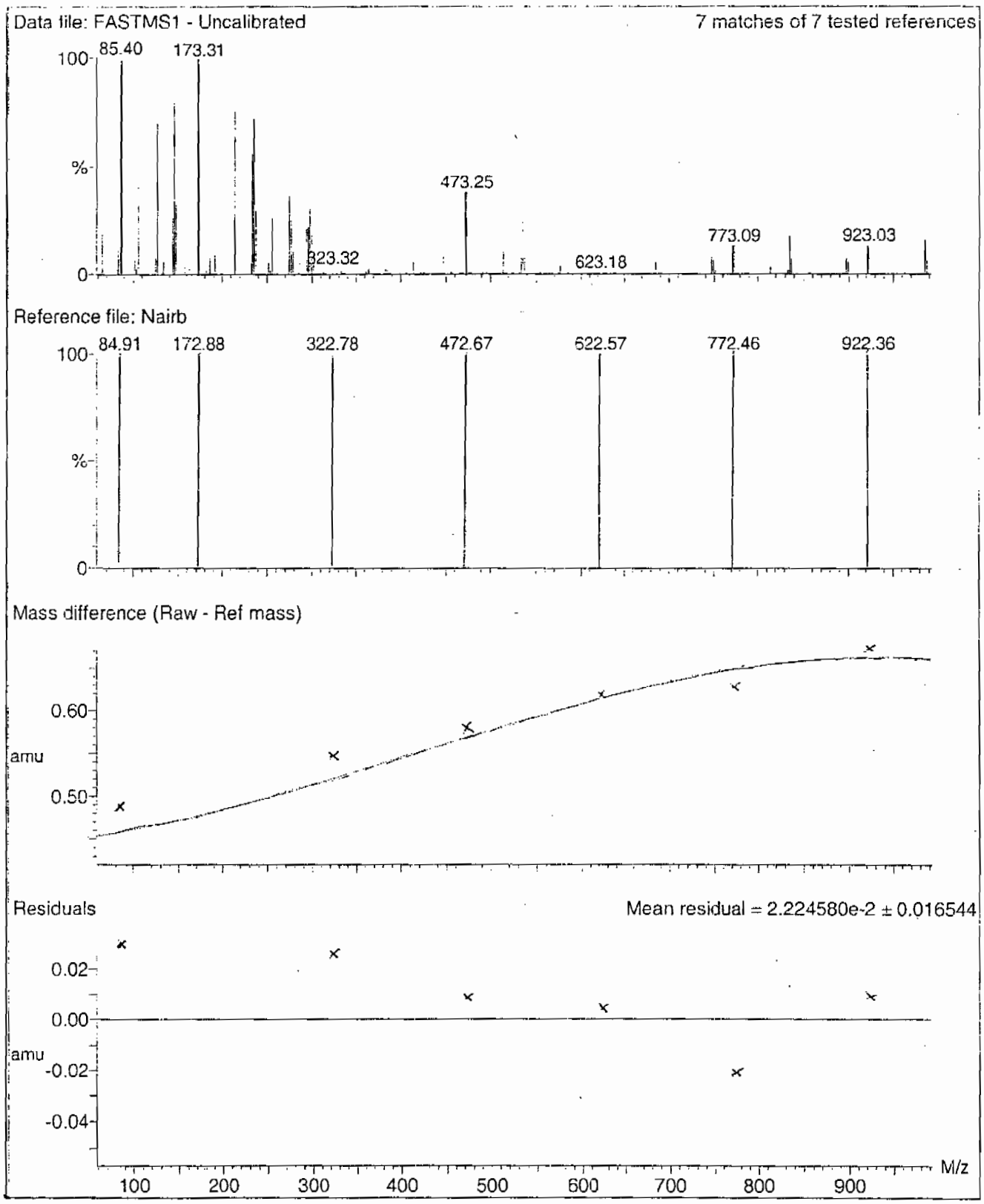

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scan Speed Compensation

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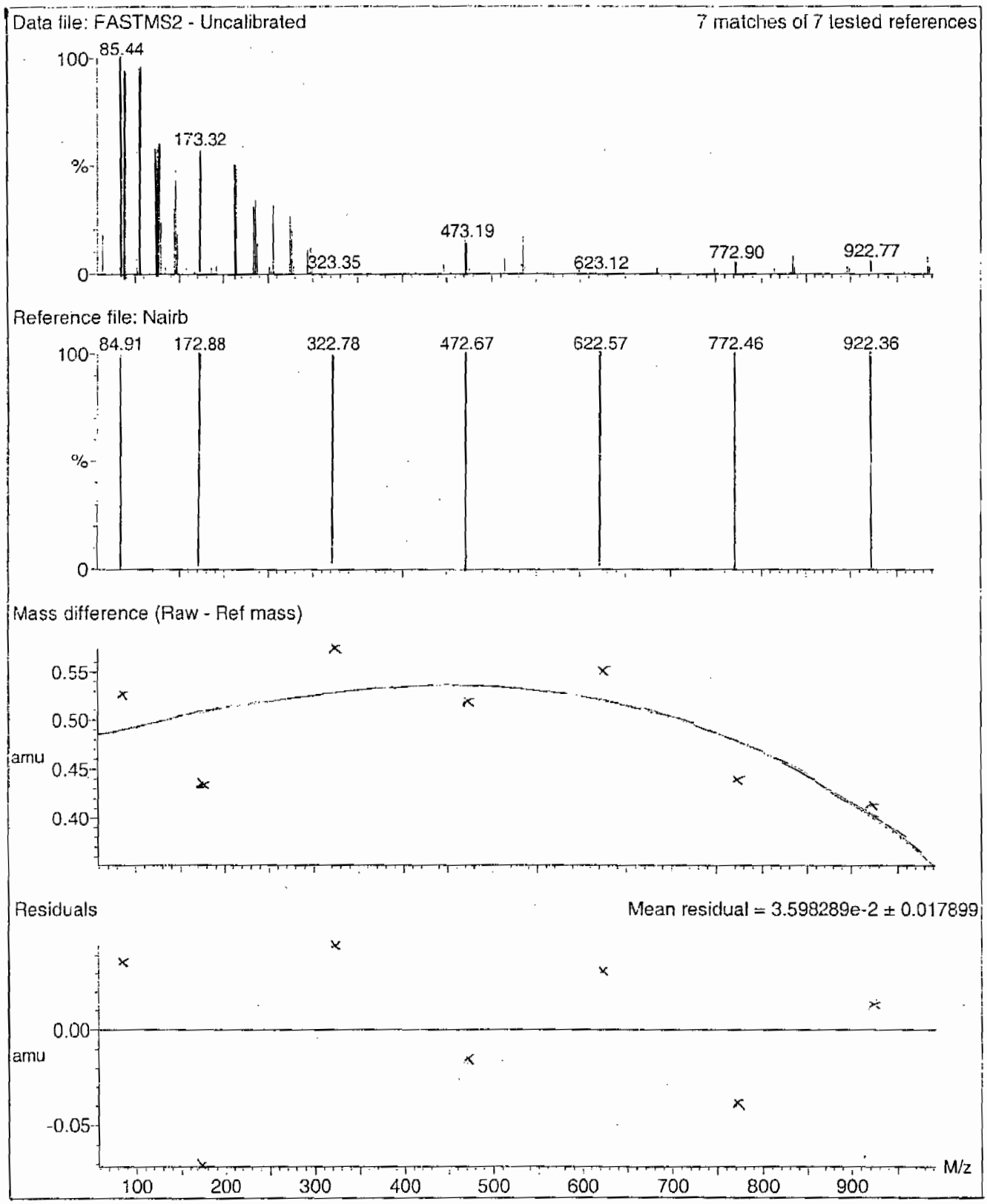

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Calibration Report - MS2 Scanning

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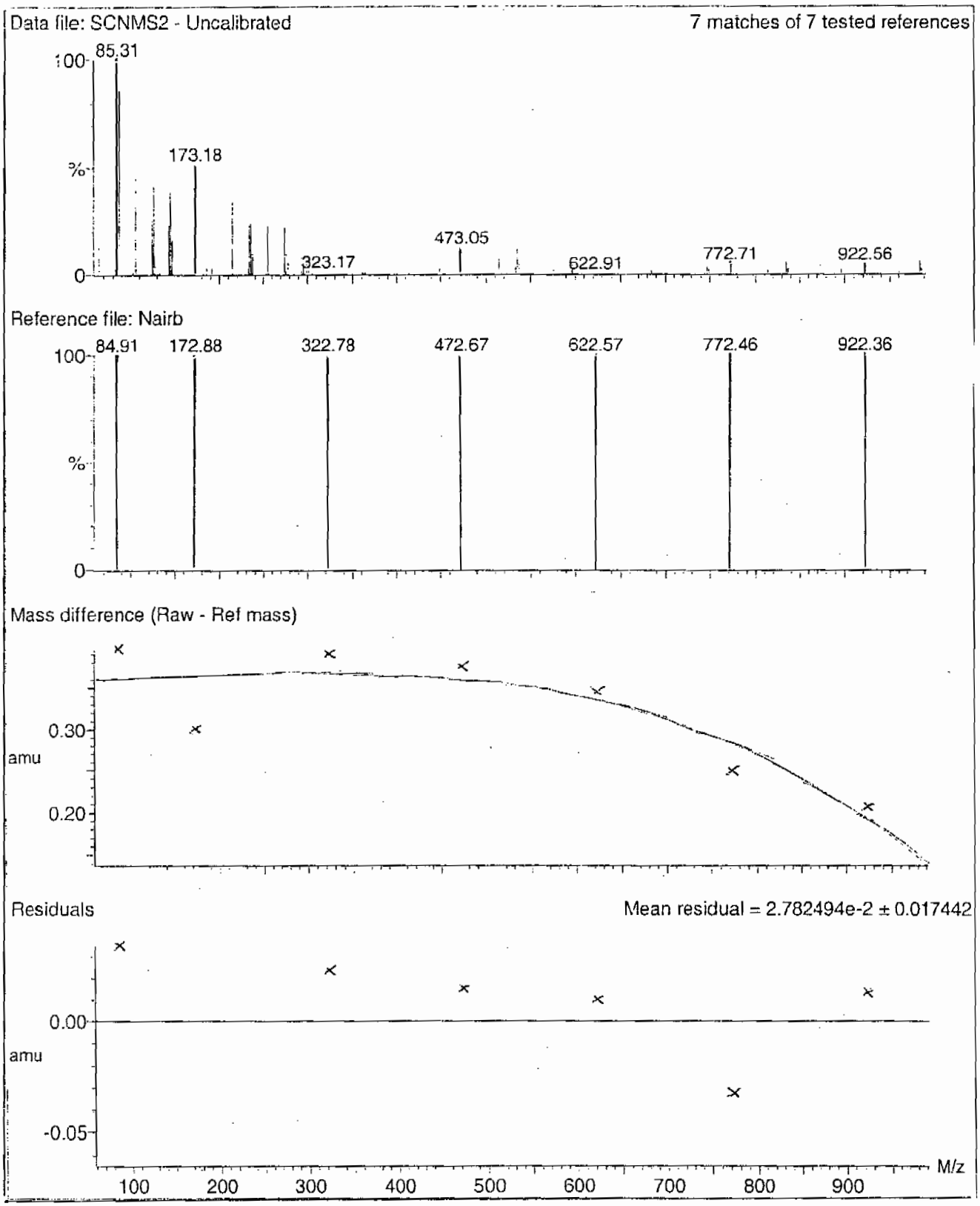
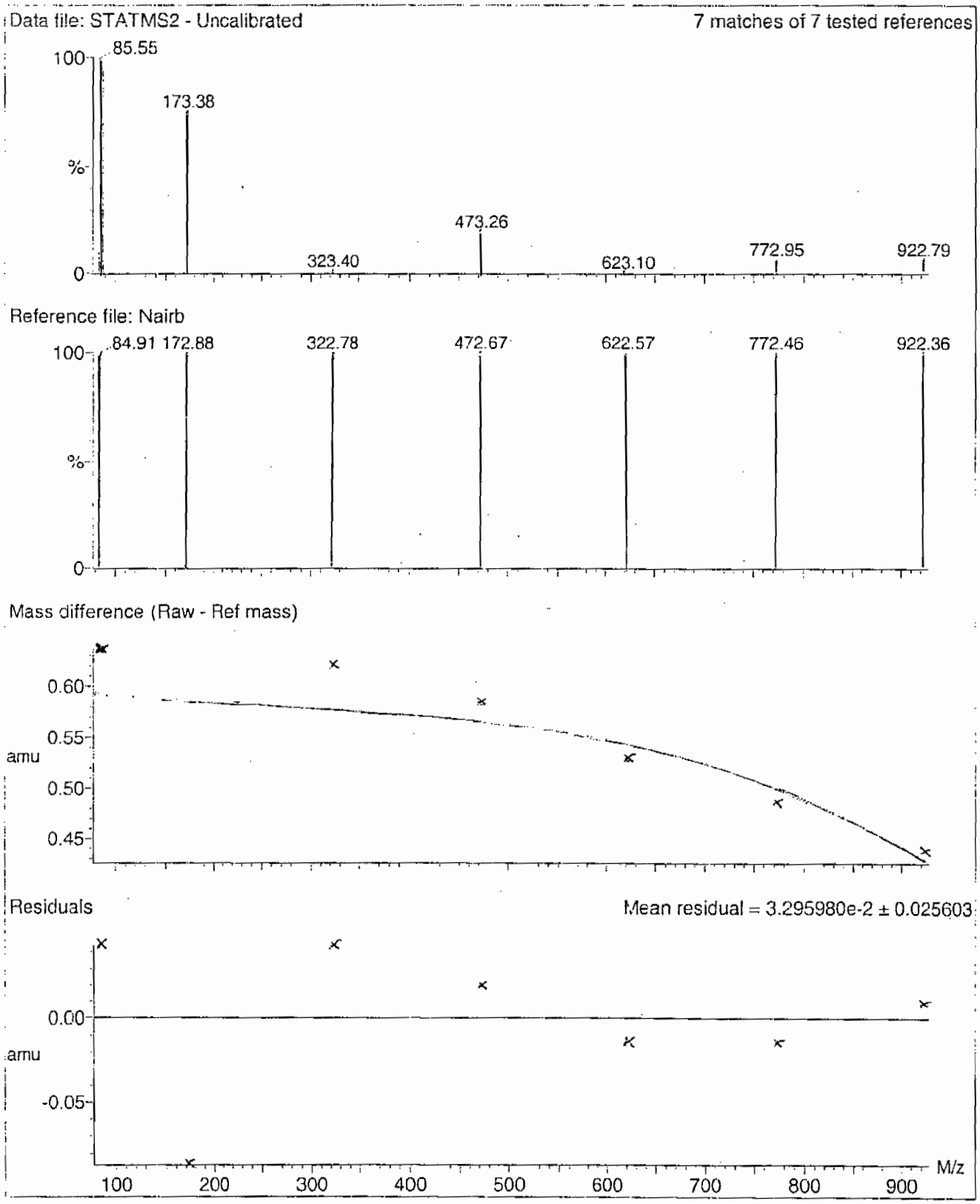


PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Static

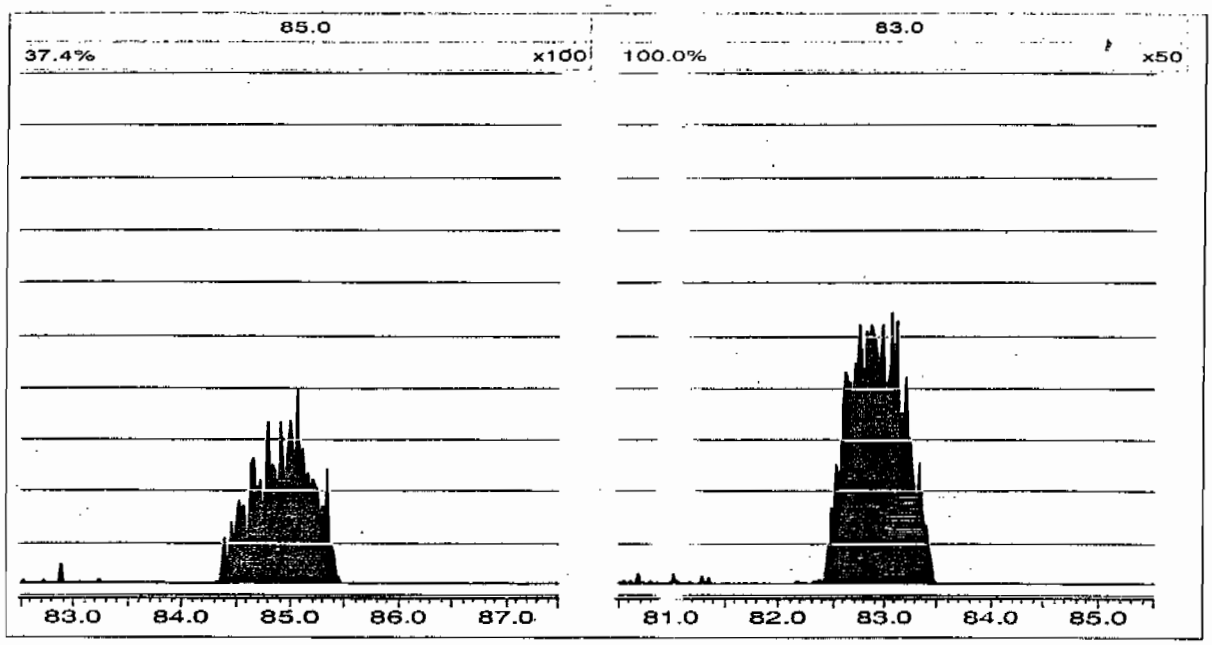
Printed: Tue Jan 08 12:21:59 2008



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Friday, January 15, 2010 13:21:37 Eastern Standard Time



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

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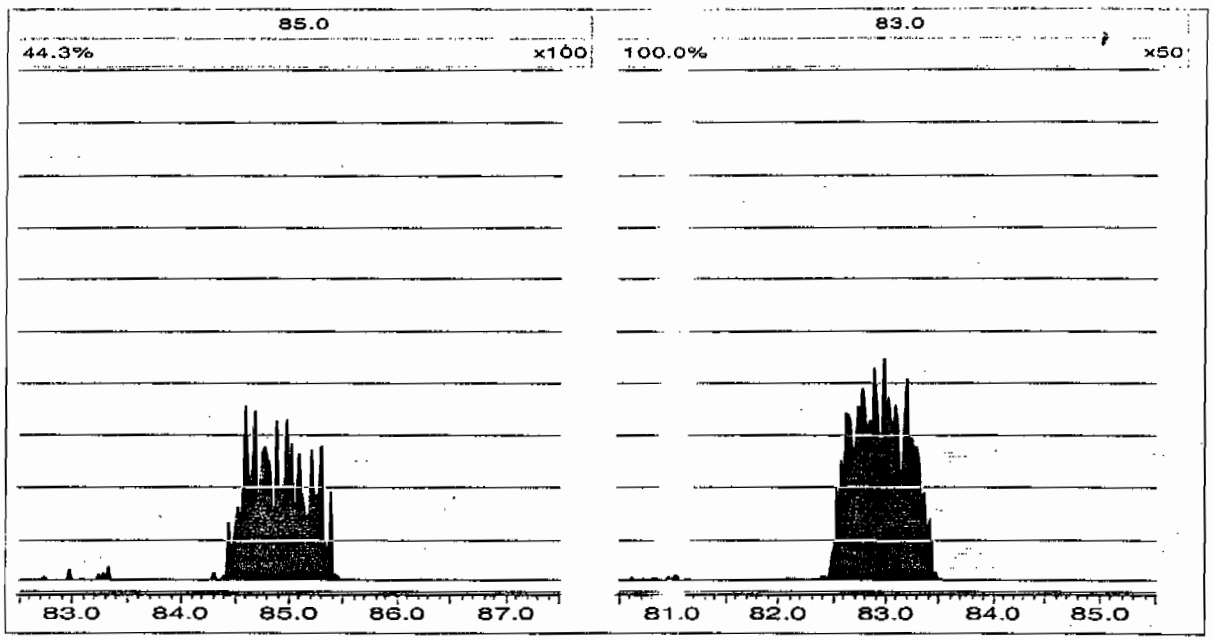

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1161

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per0115006a**	**15–JAN–10**	**24342.3**				
Lower Area Limit			**12171.15**				
Upper Area Limit			**48684.6**				
1202011852	per0115028a	15–JAN–10 21:12	22490.7	3.92	3.99218	1.018	
1202011853	per0115029a	15–JAN–10 21:21	23148.6	3.92	3.94247	1.006	
1202011858	per0115030a	15–JAN–10 21:31	24359.2	4.05	4.0667	1.004	

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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1161

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per0118006a**	**18–JAN–10**	**25236.1**				
Lower Area Limit			**12618.05**				
Upper Area Limit			**50472.2**				
244226001	per0118015a	18–JAN–10 19:15	24553.9	3.46	3.44553	.996	
1202011854	per0118016a	18–JAN–10 19:24	24482.9	3.45	3.47047	1.006	
1202011855	per0118017a	18–JAN–10 19:32	24850.8	3.47	3.48287	1.004	
244226002	per0118018a	18–JAN–10 19:41	24365.9	3.46	3.43317	.992	

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SAMPLE
DATA

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 940153

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7738

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161

GEL Sample ID: 244226001

Date Filtered: 13-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:15	per0118015a
	Perchlorate Isotope Ratio						1	18-JAN-10 19:15	per0118015a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:15	per0118015a
	Perchlorate-O(18)			0.490	ug/L		1	18-JAN-10 19:15	per0118015a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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)uantify Sample Report MassLynx 4.0 SP4
'he GEL Group, LLC Analyst: Charlers W. Wilson

)ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
'rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

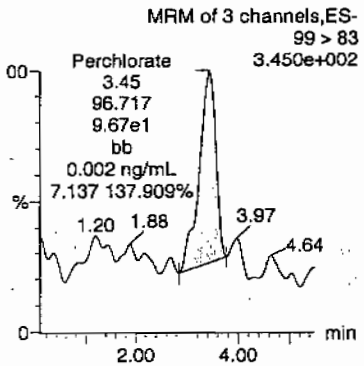
MANUAL

lame: per0118015a
'ate: 18-Jan-2010
ime: 19:15:34
): 244226001
ial: 1:3,D

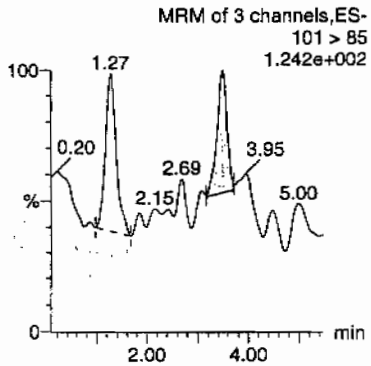
|LANL|940158|LZQ|1|RA

GWW
01-19-10

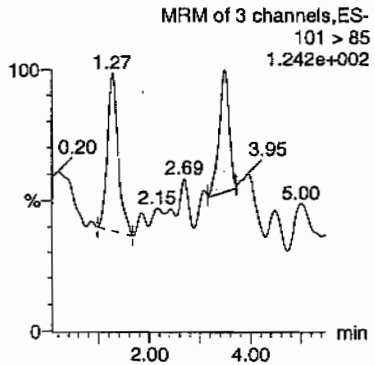
erchlorate



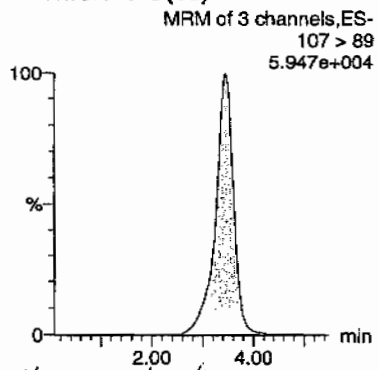
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HWW 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
14226001	Perchlorate	99 > 83	3.45	96.717	96.717	bb	19-Jan-10	08:05:27	0.0016			17.574	7.14
14226001	Perchlorate-101	101 > 85	3.50	13.535	13.535	MM	19-Jan-10	08:07:30	0.0007			14.640	
14226001	Perchlorate-O(18)	107 > 89	3.46	24553.875	24553.875	bb			0.4904	98.08	-1.92	2459.7...	

OKAY
<0500

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 940153

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7737

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161

GEL Sample ID: 244226002

Date Filtered: 13-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:41	per0118018a
	Perchlorate Isotope Ratio						1	18-JAN-10 19:41	per0118018a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	18-JAN-10 19:41	per0118018a
	Perchlorate-O(18)			0.487	ug/L		1	18-JAN-10 19:41	per0118018a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

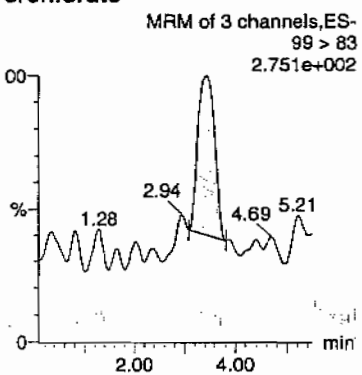
Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118018a
Date: 18-Jan-2010
Time: 19:41:08
ID: 244226002
Vial: 1:4,A

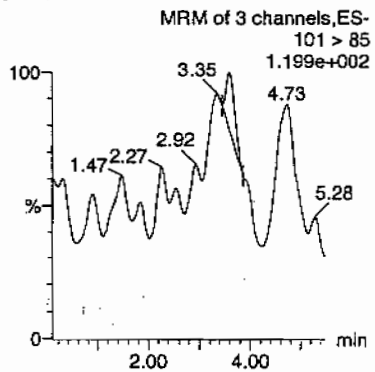
|LANL|940158|LEQ|1|RA

CWW
01-19-10

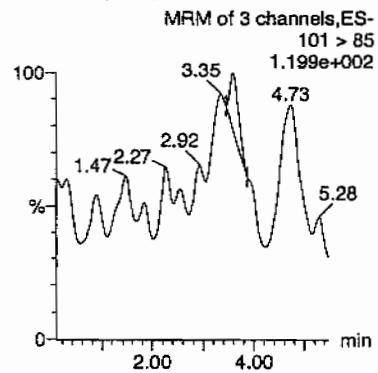
Perchlorate



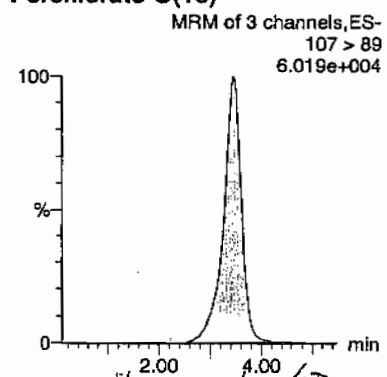
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44226002	Perchlorate	99 > 83	3.43	64.964	64.964	bb			0.0011			14.650	11.84
44226002	Perchlorate-101	101 > 85	3.58	5.488	5.488	bb			0.0003			4.061	
44226002	Perchlorate-O(18)	107 > 89	3.46	24365.871	24365.871	bb			0.4867	97.33	-2.67	1900.8...	

okay
<0.0500

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1161

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 15–JAN–10

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 56254

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1161

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 15-JAN-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 18203.38

Response Type: External Standard

Curve Type: RF

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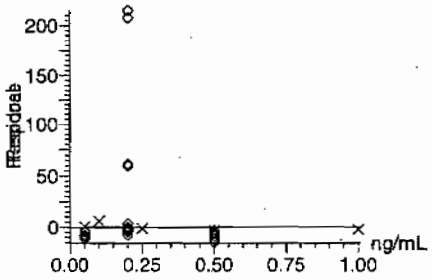
uantify Calibration Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

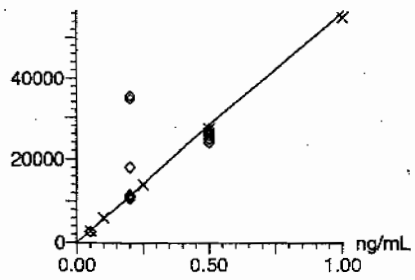
ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per011510a.mdb 18 Jan 2010 08:43:34
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011510a.cdb 18 Jan 2010 08:43:48

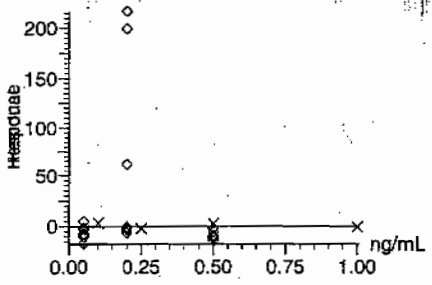
ompound name: Perchlorate
esponse Factor: 56254
RF SD: 2113.01, % Relative SD: 3.75619
esponse type: External Std, Area
urve type: RF

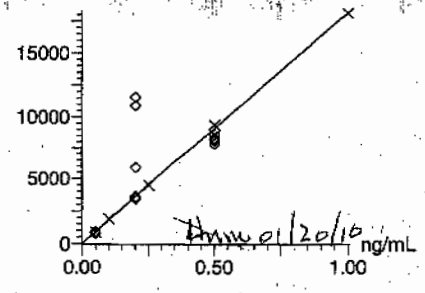




01-18-10

ompound name: Perchlorate-101
esponse Factor: 18203.4
RF SD: 580.647, % Relative SD: 3.18977
esponse type: External Std, Area
urve type: RF





01/20/10

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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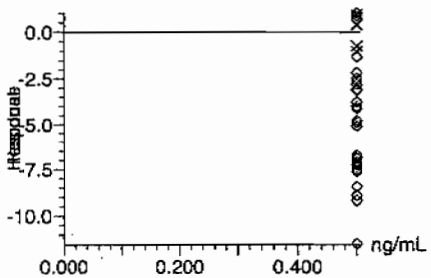
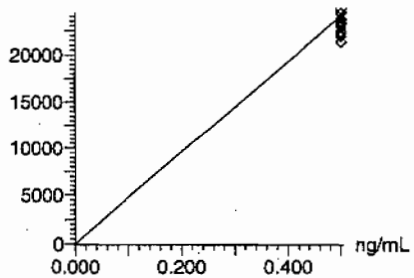
uantify Calibration Report **MassLynx 4.0 SP4**
ne GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ompound name: Perchlorate-O(18)
esponse Factor: 48228.8
RF SD: 404.995, % Relative SD: 0.839737
esponse type: External Std, Area
urve type: RF





EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1161

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 18–JAN–10

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 59004.7

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1161

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 18–JAN–10

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate–101

Coefficient of Determination:

Calibration Curve: 19454.42

Response Type: External Standard

Curve Type: RF

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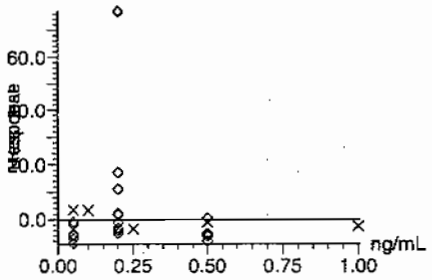
uantify Calibration Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charlers W. Wilson

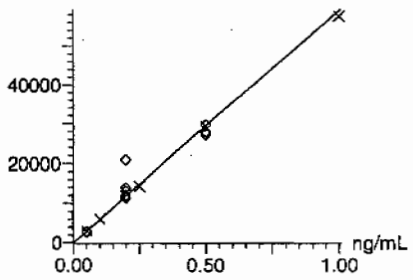
ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
inted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per011810a.mdb 19 Jan 2010 07:54:21
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011810a.cdb 19 Jan 2010 07:54:38

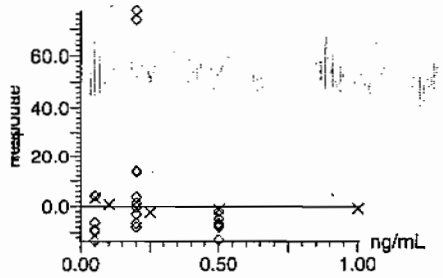
ompound name: Perchlorate
esponse Factor: 59004.7
RF SD: 1951.42, % Relative SD: 3.30723
esponse type: External Std, Area
urve type: RF

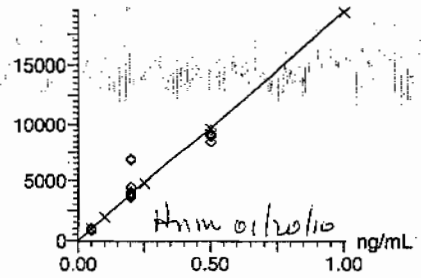




CWW
01-19-10

ompound name: Perchlorate-101
esponse Factor: 19454.4
RF SD: 414.837, % Relative SD: 2.13235
esponse type: External Std, Area
urve type: RF





HMM 01/20/10

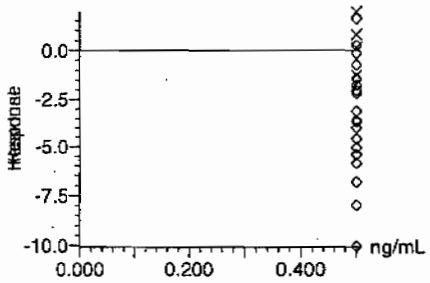
EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

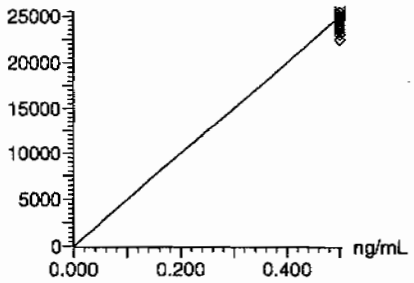
uantify Calibration Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ıst Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
'inted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ɔmpound name: Perchlorate-O(18)
esponse Factor: 50066.7
RF SD: 749.985, % Relative SD: 1.49797
esponse type: External Std, Area
ırve type: RF





:L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	96.93	15-JAN-10 18:11	per0115009a
Perchlorate Isotope Ratio		3.03		15-JAN-10 18:11	per0115009a
Perchlorate-101	.5	.49	98.8	15-JAN-10 18:11	per0115009a
Perchlorate	.5	.5	100.43	18-JAN-10 18:23	per0118009a
Perchlorate Isotope Ratio		3.11		18-JAN-10 18:23	per0118009a
Perchlorate-101	.5	.49	98.08	18-JAN-10 18:23	per0118009a

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·uantify Sample Report **MassLynx 4.0 SP4**
he GEL Group, LLC Analyst: Charlers W. Wilson

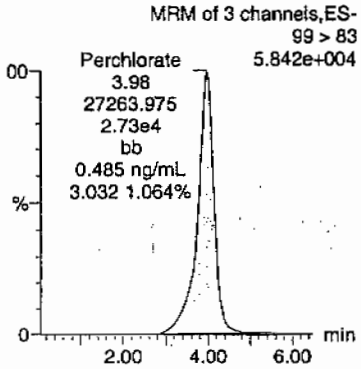
ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

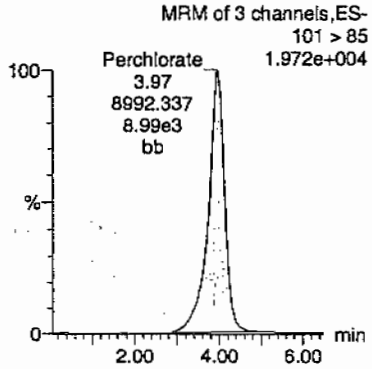
Pass
ans
01-18-10

ame: per0115009a
ate: 15-Jan-2010
ime: 18:11:06
): WCL100104-06ICV
ial: 1:2,A

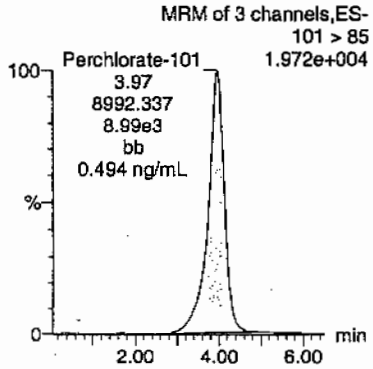
erchlorate



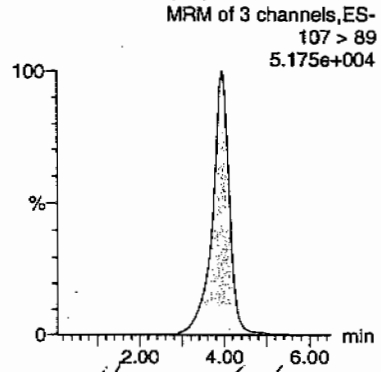
Perchlorate



Perchlorate-101



Perchlorate-O(18)



AMILC 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-06ICV	Perchlorate	99 > 83	3.98	27263.975	27263.975	bb			0.4847	96.93	-3.07	1669.1...	3.03
/CL100104-06ICV	Perchlorate-101	101 > 85	3.97	8992.337	8992.337	bb			0.4940	98.80	-1.20	430.961	
/CL100104-06ICV	Perchlorate-O(18)	107 > 89	3.95	24367.420	24367.420	bb			0.5052	101.05	1.05	2663.2...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

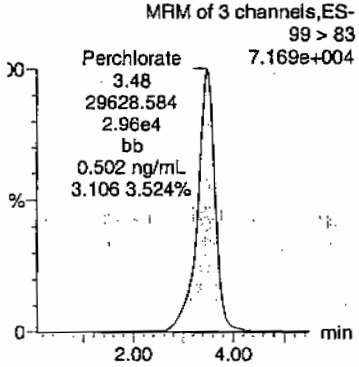
ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

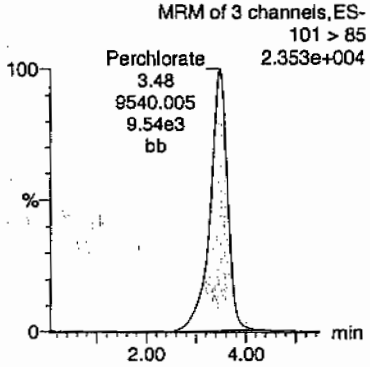
ame: per0118009a
ate: 18-Jan-2010
ime: 18:23:55
I: WCL100118-06ICV
al: 1:2,A

Pass
CWW
01-19-10

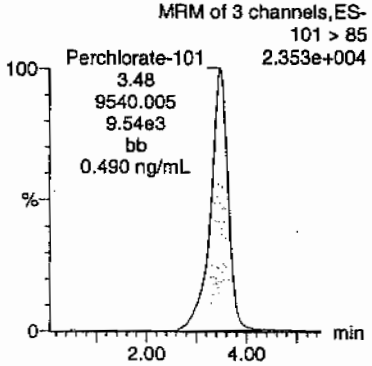
erchlorate



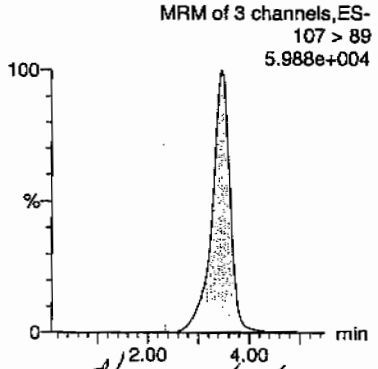
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmw 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-06ICV	Perchlorate	99 > 83	3.48	29628.584	29628.584	bb			0.5021	100.43	0.43	5754.5...	3.11
CL100118-06ICV	Perchlorate-101	101 > 85	3.48	9540.005	9540.005	bb			0.4904	98.08	-1.92	755.962	
CL100118-06ICV	Perchlorate-O(18)	107 > 89	3.47	24516.842	24516.842	bb			0.4897	97.94	-2.06	2610.1...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.47	94.91	15-JAN-10 19:17	per0115016a
Perchlorate Isotope Ratio		3.11		15-JAN-10 19:17	per0115016a
Perchlorate-101	.5	.47	94.42	15-JAN-10 19:17	per0115016a
Perchlorate	.5	.45	90.92	15-JAN-10 20:43	per0115025a
Perchlorate Isotope Ratio		3.13		15-JAN-10 20:43	per0115025a
Perchlorate-101	.5	.45	89.68	15-JAN-10 20:43	per0115025a
Perchlorate	.5	.47	93.21	15-JAN-10 22:47	per0115038a
Perchlorate Isotope Ratio		3.18		15-JAN-10 22:47	per0115038a
Perchlorate-101	.5	.45	90.5	15-JAN-10 22:47	per0115038a
Perchlorate	.5	.47	93.83	18-JAN-10 20:06	per0118021a
Perchlorate Isotope Ratio		3.04		18-JAN-10 20:06	per0118021a
Perchlorate-101	.5	.47	93.61	18-JAN-10 20:06	per0118021a

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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Date: 15-Jan-2010
Time: 19:17:55
ID: WCL100104-06CCV
Vial: 1:2,A

Pass
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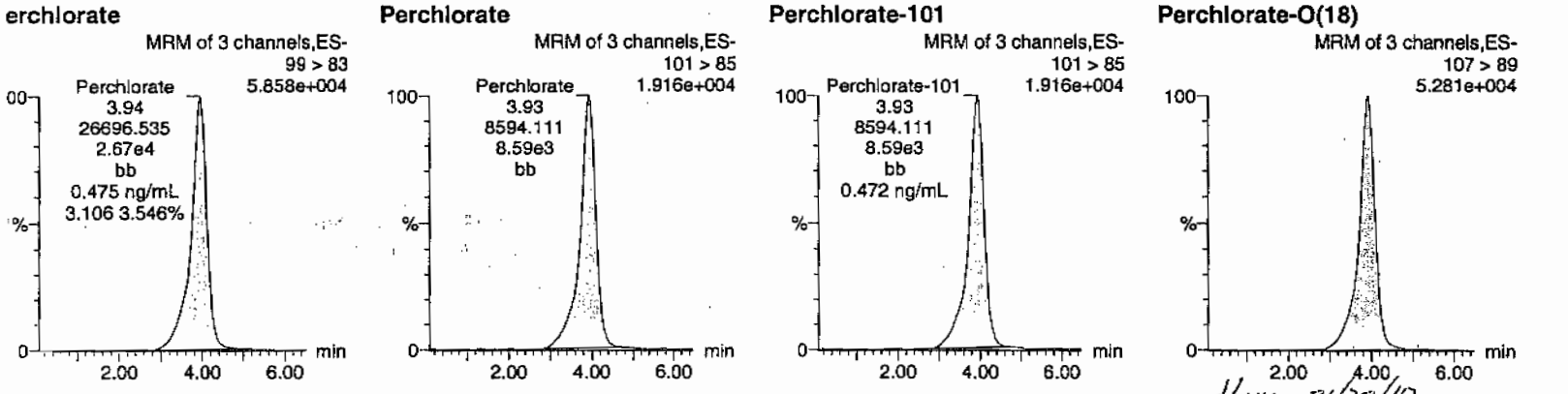
01-18-10



Hmc 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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CL100104-06CCV	Perchlorate-101	101 > 85	3.93	8594.111	8594.111	bb			0.4721	94.42	-5.58	579.361	
CL100104-06CCV	Perchlorate-O(18)	107 > 89	3.92	24366.004	24366.004	bb			0.5052	101.04	1.04	6703.9...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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ie GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ıme: per0115025a
ıte: 15-Jan-2010
ne: 20:43:46
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al: 1:2,A

Pass
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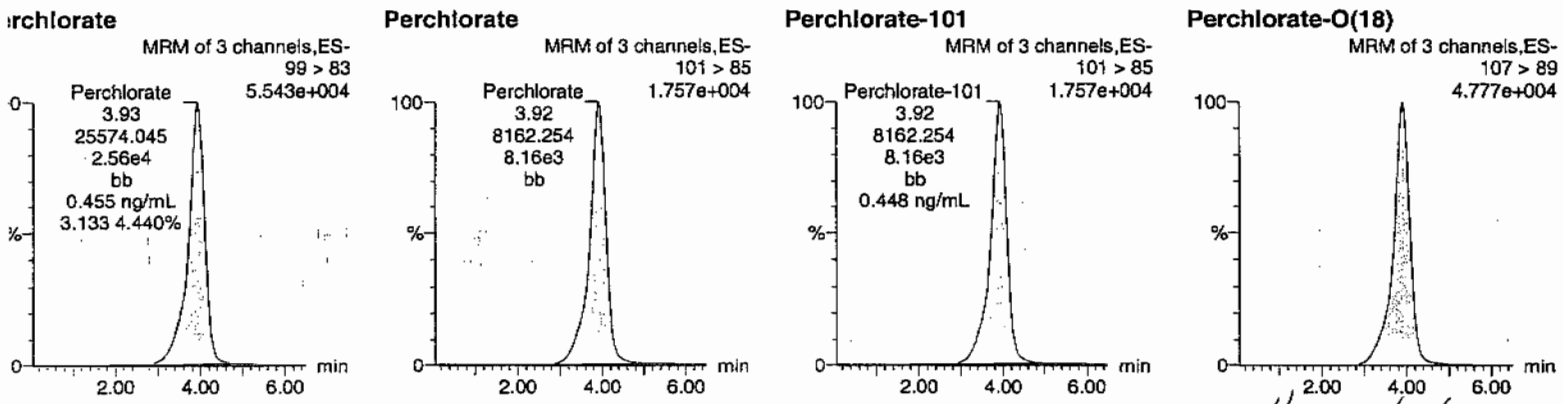
01-18-10



Hmw 01/20/10

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CL100104-06CCV	Perchlorate	99 > 83	3.93	25574.045	25574.045	bb			0.4546	90.92	-9.08	751.918	3.13
CL100104-06CCV	Perchlorate-101	101 > 85	3.92	8162.254	8162.254	bb			0.4484	89.68	-10.32	469.738	
CL100104-06CCV	Perchlorate-O(18)	107 > 89	3.91	22330.109	22330.109	bb			0.4630	92.60	-7.40	1588.6...	

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

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rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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ate: 15-Jan-2010
ime: 22:47:54
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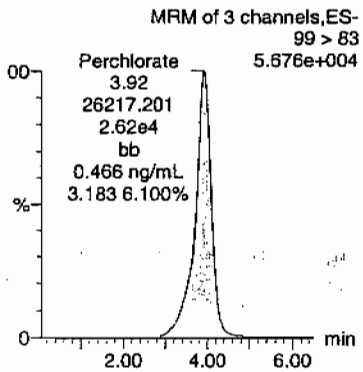
Pass
aw
01-18-10

erchlorate



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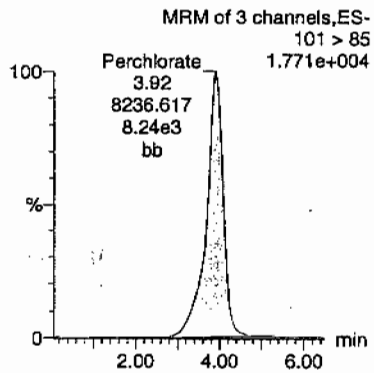
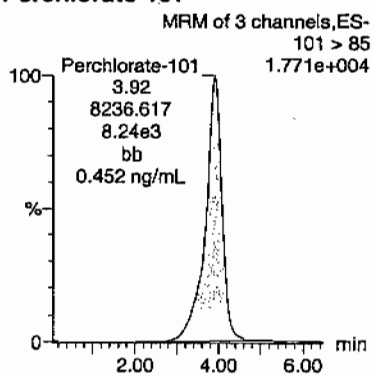
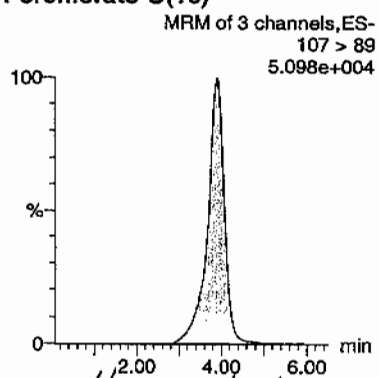


Perchlorate-101



Perchlorate-O(18)



HMW 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-06CCV	Perchlorate	99 > 83	3.92	26217.201	26217.201	bb			0.4661	93.21	-6.79	2136.7...	3.18
/CL100104-06CCV	Perchlorate-101	101 > 85	3.92	8236.617	8236.617	bb			0.4525	90.50	-9.50	361.472	
/CL100104-06CCV	Perchlorate-O(18)	107 > 89	3.89	23116.453	23116.453	bb			0.4793	95.86	-4.14	1139.5...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

ne GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

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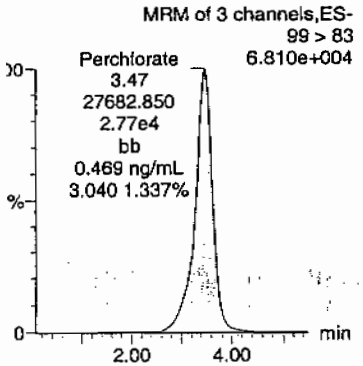
ate: 18-Jan-2010
me: 20:06:46
: WCL100118-06CCV
al: 1:2,A

Pass
CWW
01-19-10

erchlorate



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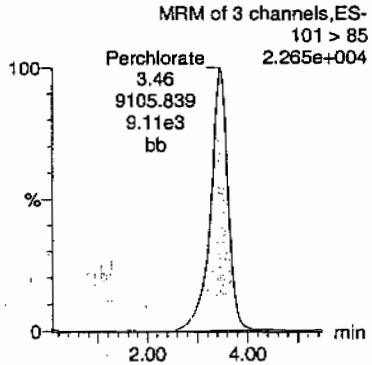
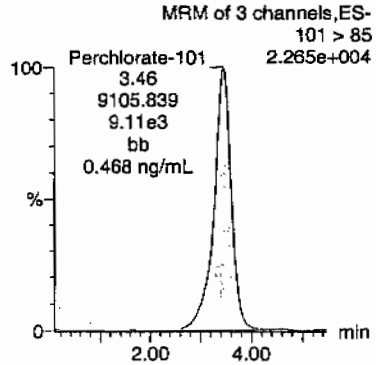
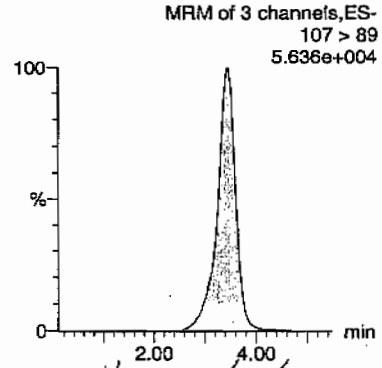


Perchlorate-101



Perchlorate-O(18)



HMW 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-06CCV	Perchlorate	99 > 83	3.47	27682.850	27682.850	bb			0.4692	93.83	-6.17	6142.8...	3.04
CL100118-06CCV	Perchlorate-101	101 > 85	3.46	9105.839	9105.839	bb			0.4681	93.61	-6.39	1064.3...	
CL100118-06CCV	Perchlorate-O(18)	107 > 89	3.45	23031.451	23031.451	bb			0.4600	92.00	-8.00	2025.9...	

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	95.18	15-JAN-10 18:30	per0115011a
Perchlorate Isotope Ratio		2.8		15-JAN-10 18:30	per0115011a
Perchlorate-101	.05	.05	105.09	15-JAN-10 18:30	per0115011a
Perchlorate	.05	.05	96.83	15-JAN-10 19:36	per0115018a
Perchlorate Isotope Ratio		3.23		15-JAN-10 19:36	per0115018a
Perchlorate-101	.05	.05	92.61	15-JAN-10 19:36	per0115018a
Perchlorate	.05	.05	90.97	15-JAN-10 21:02	per0115027a
Perchlorate Isotope Ratio		2.84		15-JAN-10 21:02	per0115027a
Perchlorate-101	.05	.05	98.99	15-JAN-10 21:02	per0115027a
Perchlorate	.05	.04	88.68	15-JAN-10 23:07	per0115040a
Perchlorate Isotope Ratio		2.94		15-JAN-10 23:07	per0115040a

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1161

Lab Code: GEL

Reporting Units: ug/L

Perchlorate–101	.05	.05	93.11	15–JAN–10 23:07	per0115040a
Perchlorate	.05	.05	99.3	18–JAN–10 18:41	per0118011a
Perchlorate Isotope Ratio		2.89		18–JAN–10 18:41	per0118011a
Perchlorate–101	.05	.05	104.26	18–JAN–10 18:41	per0118011a
Perchlorate	.05	.05	98.29	18–JAN–10 20:23	per0118023a
Perchlorate Isotope Ratio		3.3		18–JAN–10 20:23	per0118023a
Perchlorate–101	.05	.05	90.43	18–JAN–10 20:23	per0118023a

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

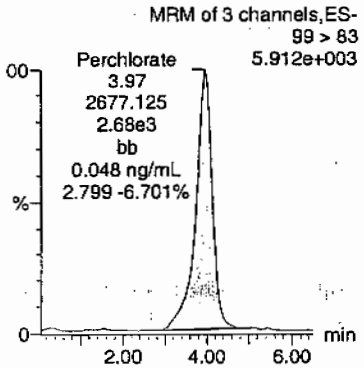
ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

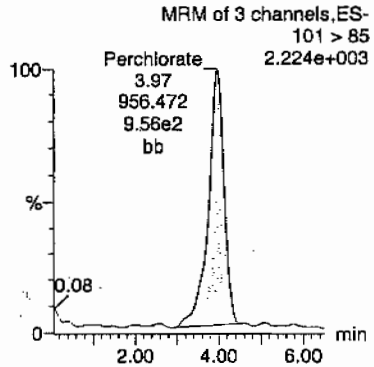
ame: per0115011a
ate: 15-Jan-2010
ime: 18:30:12
): WCL100104-07CRI
ial: 1:2,B

Pass
aw
01-18-10

erchlorate



Perchlorate



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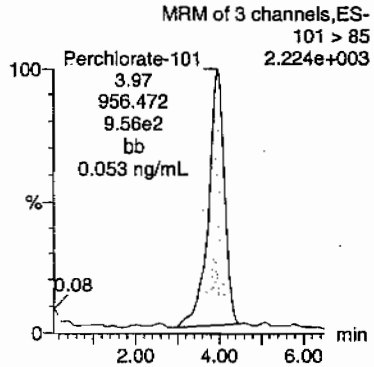
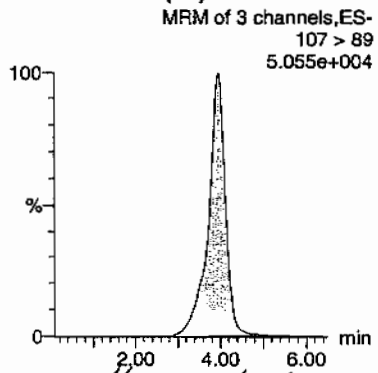


Perchlorate-O(18)



Hmm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100104-07CRI	Perchlorate	99 > 83	3.97	2677.125	2677.125	bb			0.0476	95.18	-4.82	233.778	2.80
'CL100104-07CRI	Perchlorate-101	101 > 85	3.97	956.472	956.472	bb			0.0525	105.09	5.09	322.926	
'CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.95	23597.420	23597.420	bb			0.4893	97.86	-2.14	3376.5...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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uantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

me: per0115018a
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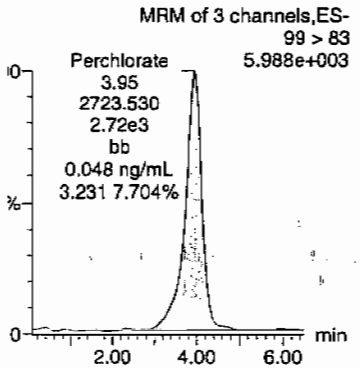
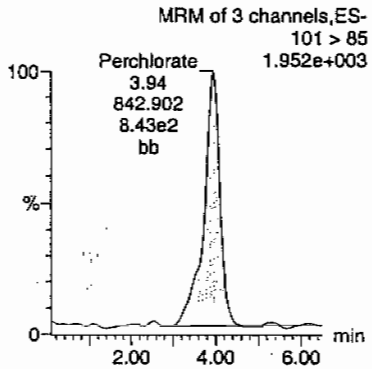
01-18-10

rchlorate



Perchlorate



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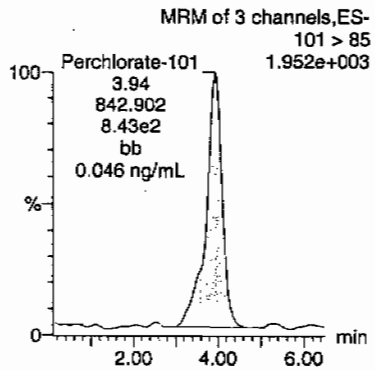
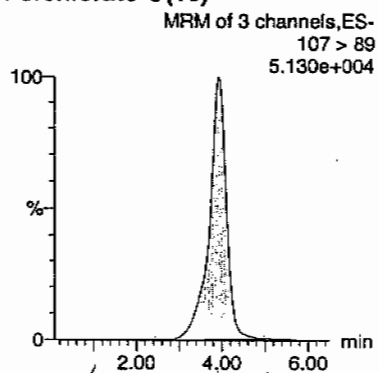


Perchlorate-O(18)



HMK 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.95	2723.530	2723.530	bb			0.0484	96.83	-3.17	130.049	3.23
CL100104-07CRI	Perchlorate-101	101 > 85	3.94	842.902	842.902	bb			0.0463	92.61	-7.39	52.552	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.93	23520.729	23520.729	bb			0.4877	97.54	-2.46	3968.1...	

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ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ıst Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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CW
01-18-10

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ate: 15-Jan-2010
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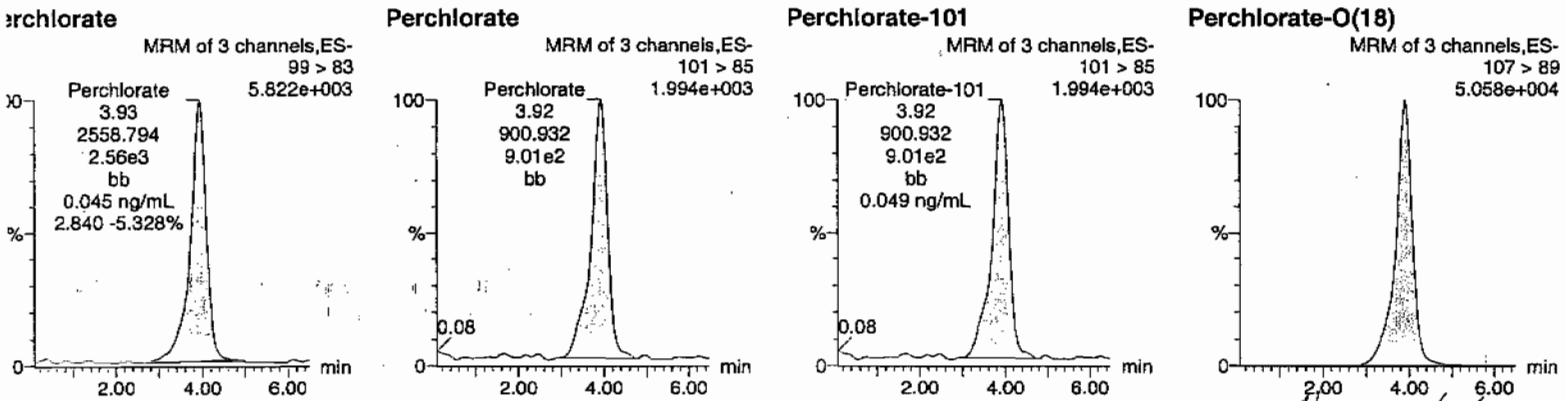

HMW 01/20/10

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CL100104-07CRI	Perchlorate	99 > 83	3.93	2558.794	2558.794	bb			0.0455	90.97	-9.03	133.718	2.84
CL100104-07CRI	Perchlorate-101	101 > 85	3.92	900.932	900.932	bb			0.0495	98.99	-1.01	22.594	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.92	23482.980	23482.980	bb			0.4869	97.38	-2.62	612.804	

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ıst Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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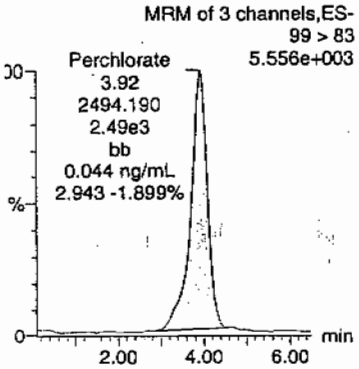
Pass
AWW
01-18-10

erchlorate



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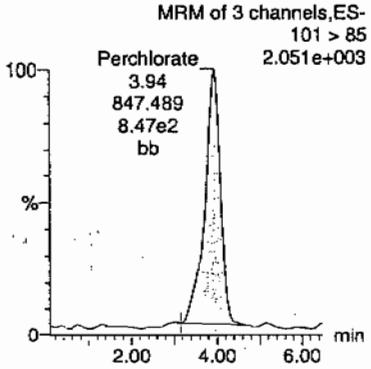

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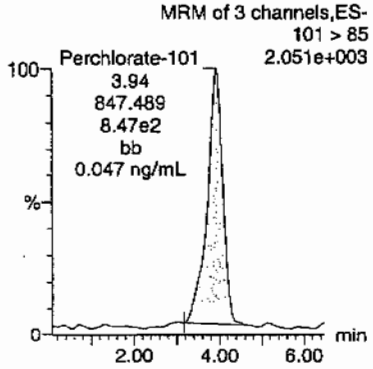

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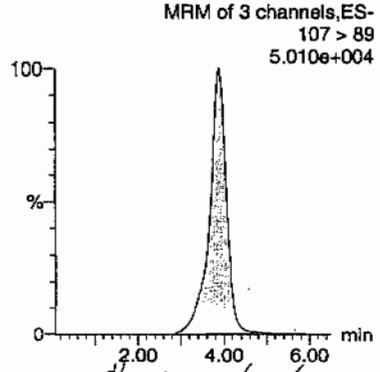

HMW 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.92	2494.190	2494.190	bb			0.0443	88.68	-11.32	146.232	2.94
CL100104-07CRI	Perchlorate-101	101 > 85	3.94	847.489	847.489	bb			0.0466	93.11	-6.89	50.462	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.89	22963.768	22963.768	bb			0.4761	95.23	-4.77	771.020	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

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01-19-10

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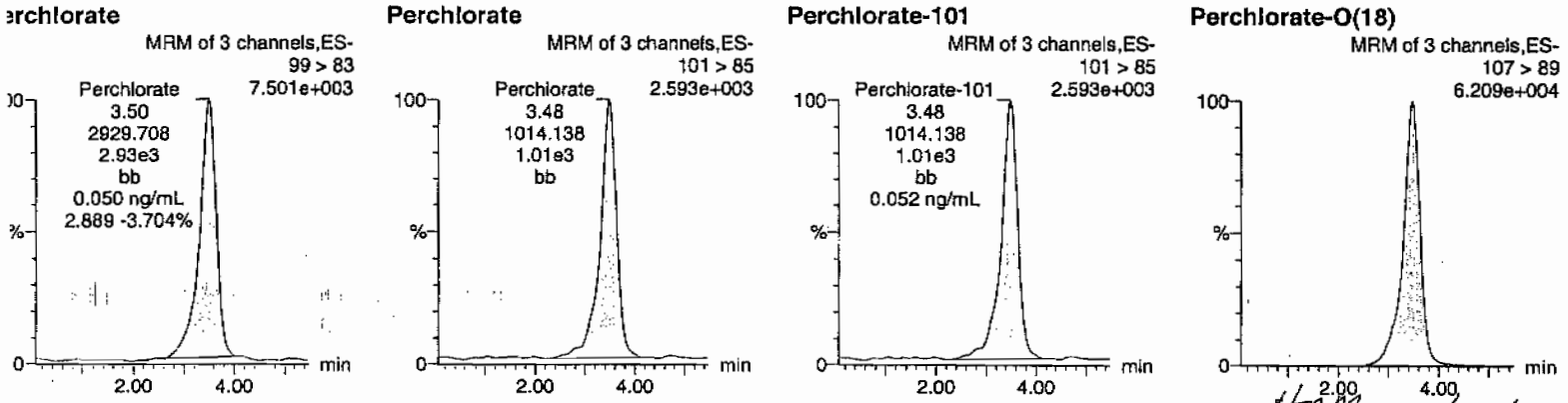

HMM 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-07CRI	Perchlorate	99 > 83	3.50	2929.708	2929.708	bb			0.0497	99.30	-0.70	386.620	2.89
CL100118-07CRI	Perchlorate-101	101 > 85	3.48	1014.138	1014.138	bb			0.0521	104.26	4.26	225.019	
CL100118-07CRI	Perchlorate-O(18)	107 > 89	3.47	25097.045	25097.045	bb			0.5013	100.25	0.25	1981.7...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

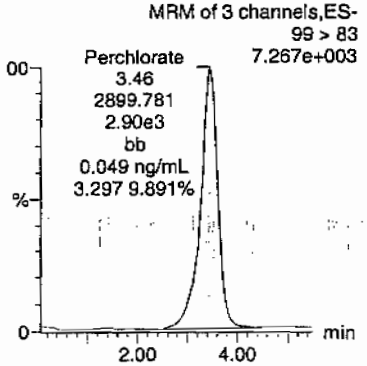
Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

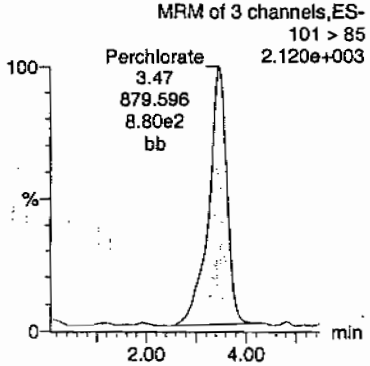
Name: per0118023a
Date: 18-Jan-2010
Time: 20:23:59
ID: WCL100118-07CRI
Vial: 1:2,B

Pwd
aw
01-19-10

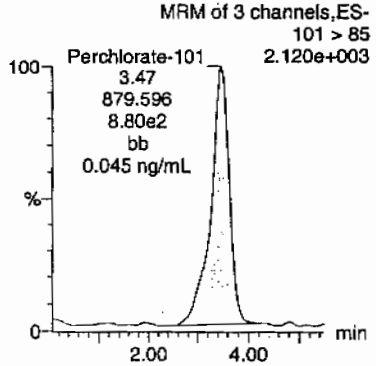
Perchlorate



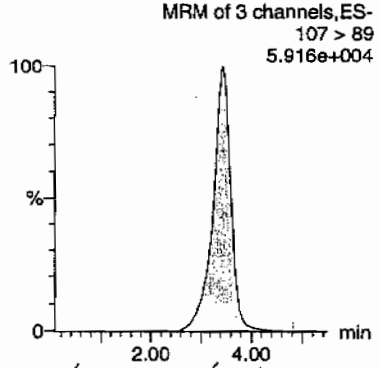
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-07CRI	Perchlorate	99 > 83	3.46	2899.781	2899.781	bb			0.0491	98.29	-1.71	512.658	3.30
CL100118-07CRI	Perchlorate-101	101 > 85	3.47	879.596	879.596	bb			0.0452	90.43	-9.57	137.741	
CL100118-07CRI	Perchlorate-O(18)	107 > 89	3.45	24250.887	24250.887	bb			0.4844	96.87	-3.13	1435.0...	

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QUALITY CONTROL

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 940153

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1161

GEL Sample ID: 1202011852

Date Filtered: 13-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	15-JAN-10 21:12	per0115028a
	Perchlorate Isotope Ratio						1	15-JAN-10 21:12	per0115028a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	15-JAN-10 21:12	per0115028a
	Perchlorate-O(18)			0.466	ug/L		1	15-JAN-10 21:12	per0115028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

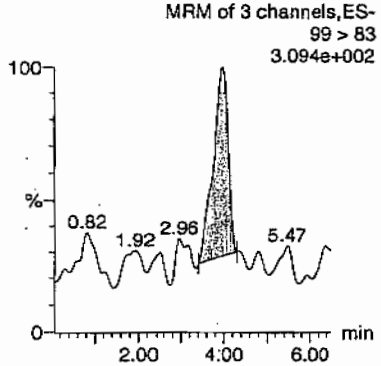
Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Name: per0115028a
Date: 15-Jan-2010
Time: 21:12:23
ID: 1202011852
Vial: 1:5,A

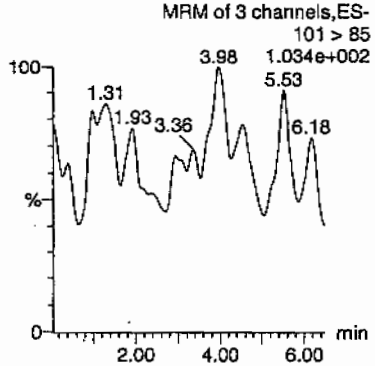
|LANL|940158|LZW|MB|1|

AW 01-18-10

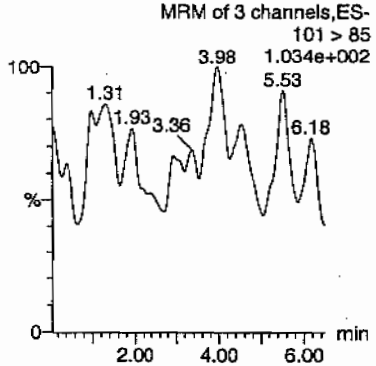
Perchlorate



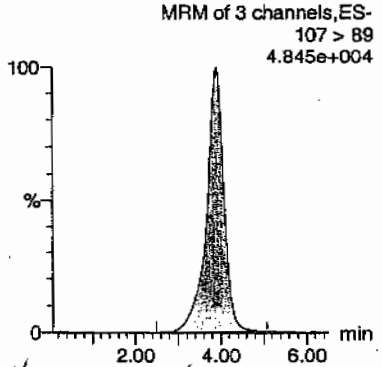
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMK 01/20/10

D...	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202011852	Perchlorate	99 > 83	3.99	89.566	89.566	bb			0.0016			29.260	0.00
202011852	Perchlorate-101	101 > 85											
202011852	Perchlorate-O(18)	107 > 89	3.92	22490.678	22490.678	bb			0.4663	93.27 ✓	-6.73	512.950	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 940153

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 13–JAN–10

GEL Job No (SDG): 10–1161

GEL Sample ID: 1202011853

Date Filtered: 13–JAN–10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.05	.2	0.192	ug/L	J	1	15–JAN–10 21:21	per0115029a
	Perchlorate Isotope Ratio			3			1	15–JAN–10 21:21	per0115029a
14797–73–0	Perchlorate–101	.05	.2	0.198	ug/L	J	1	15–JAN–10 21:21	per0115029a
	Perchlorate–O(18)			0.480	ug/L		1	15–JAN–10 21:21	per0115029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

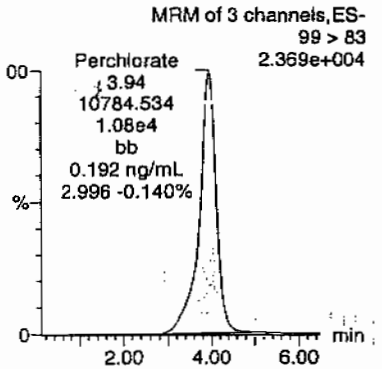
ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115029a
ate: 15-Jan-2010
ime: 21:21:57
): 1202011853
ial: 1:5,B

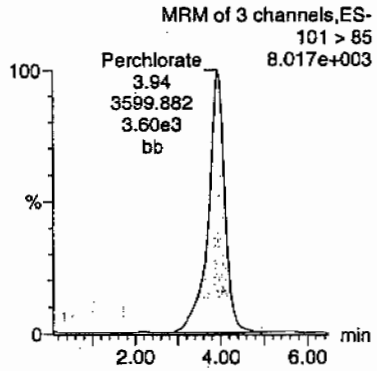
|LANL|940158|LZW|LCS|11|

GWW
9-18-10

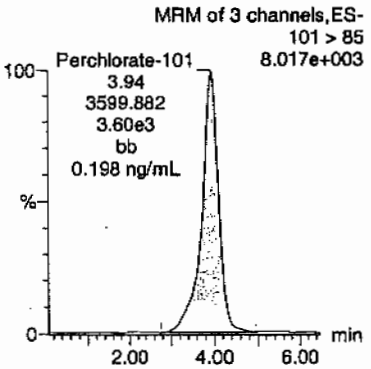
erchlorate



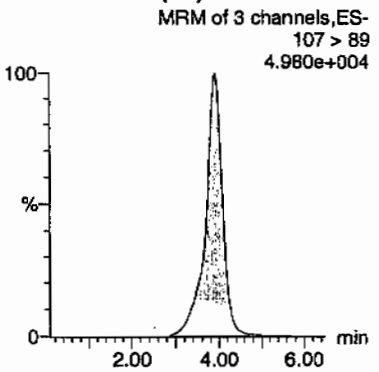
Perchlorate



Perchlorate-101



Perchlorate-O(18)



)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202011853	Perchlorate	99 > 83	3.94	10784.534	10784.534	bb			0.1917	95.86	-4.14	549.462	3.00
202011853	Perchlorate-101	101 > 85	3.94	3599.882	3599.882	bb			0.1978	98.88	-1.12	634.866	
202011853	Perchlorate-O(18)	107 > 89	3.92	23148.611	23148.611	bb			0.4800	95.99	-4.01	3521.6...	

$\frac{10784.534}{56254} = 0.1917$

Hmm 01/20/10

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 940153

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7738MS

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161

GEL Sample ID: 1202011854

Date Filtered: 13-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.192	ug/L	J	1	18-JAN-10 19:24	per0118016a
	Perchlorate Isotope Ratio			3			1	18-JAN-10 19:24	per0118016a
14797-73-0	Perchlorate-101	.05	.2	0.194	ug/L	J	1	18-JAN-10 19:24	per0118016a
	Perchlorate-O(18)			0.489	ug/L		1	18-JAN-10 19:24	per0118016a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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.antify Sample Report MassLynx 4.0 SP4
, he GEL Group, LLC Analyst: Charlers W. Wilson

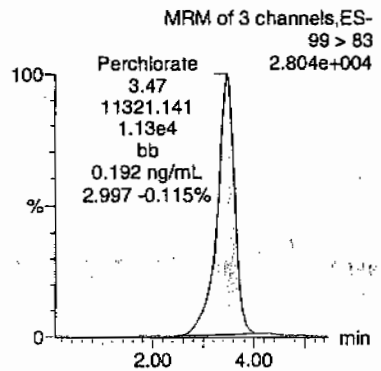
Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

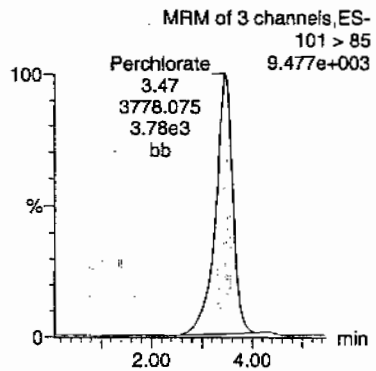
Name: per0118016a
Date: 18-Jan-2010
Time: 19:24:05
ID: 1202011854 | LANL | 940158 | LEQ | MS | 1 | RA
Vial: 1:3,E

01-18-10

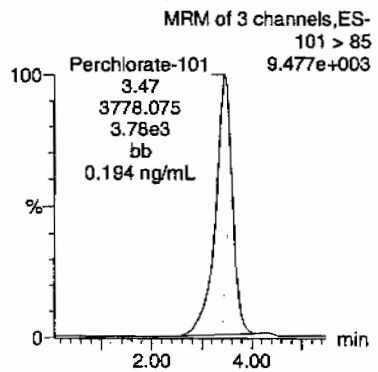
Perchlorate



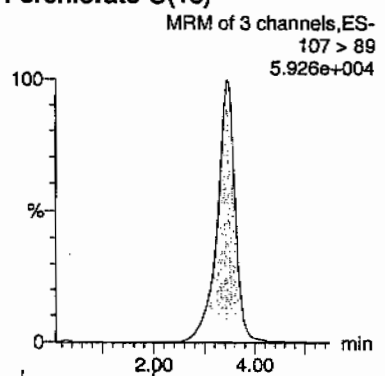
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202011854	Perchlorate	99 > 83	3.47	11321.141	11321.141	bb			0.1919	95.93	-4.07	1012.6...	3.00
1202011854	Perchlorate-101	101 > 85	3.47	3778.075	3778.075	bb			0.1942	97.10	-2.90	555.456	
1202011854	Perchlorate-O(18)	107 > 89	3.45	24482.922	24482.922	bb			0.4890	97.80	-2.20	1301.5...	

;EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 940153

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE12-10-7738MSD

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161

GEL Sample ID: 1202011855

Date Filtered: 13-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.198	ug/L	J	1	18-JAN-10 19:32	per0118017a
	Perchlorate Isotope Ratio			2.96			1	18-JAN-10 19:32	per0118017a
14797-73-0	Perchlorate-101	.05	.2	0.203	ug/L		1	18-JAN-10 19:32	per0118017a
	Perchlorate-O(18)			0.496	ug/L		1	18-JAN-10 19:32	per0118017a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

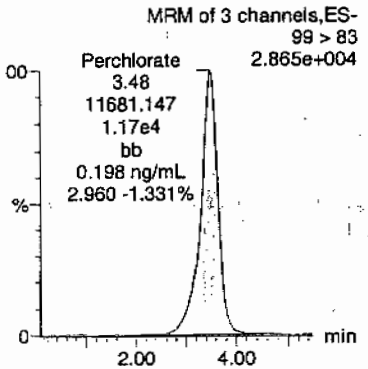
ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ame: per0118017a
ate: 18-Jan-2010
ime: 19:32:37
): 1202011855
ial: 1:3,F

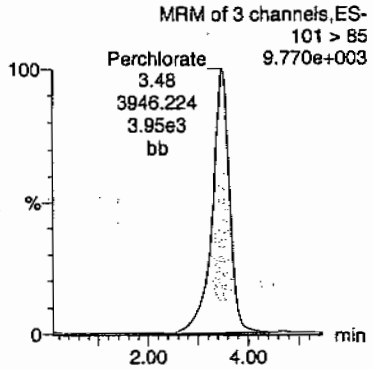
|LANL|940158|LZQ|MSD|1| RA

01-19-10

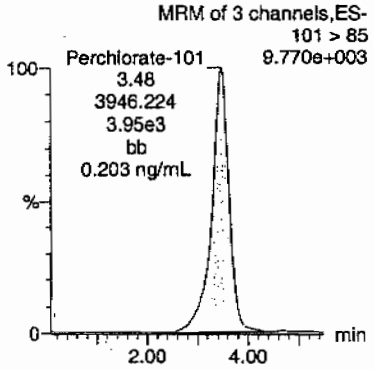
erchlorate



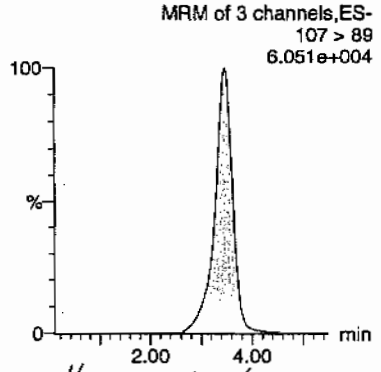
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmw 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202011855	Perchlorate	99 > 83	3.48	11681.147	11681.147	bb			0.1980	98.98	-1.02	573.180	2.96
202011855	Perchlorate-101	101 > 85	3.48	3946.224	3946.224	bb			0.2028	101.42	1.42	436.014	
202011855	Perchlorate-O(18)	107 > 89	3.47	24850.814	24850.814	bb			0.4964	99.27	-0.73	6032.6...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 940153 **Verified by:** _____

Analyst: Charles Wilson

Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6

Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202011852 MB	13-JAN-2010 11:06:01	10	10	1
1202011853 LCS	13-JAN-2010 11:06:01	10	10	1
244129001	13-JAN-2010 11:06:01	10	10	1
244129002	13-JAN-2010 11:06:01	10	10	1
244129003	13-JAN-2010 11:06:01	10	10	1
244145001	13-JAN-2010 11:06:01	10	10	1
244149001	13-JAN-2010 11:06:01	10	10	1
244208001	13-JAN-2010 11:06:01	10	10	1
244208002	13-JAN-2010 11:06:01	10	10	1
244213001	13-JAN-2010 11:06:01	10	10	1
244217001	13-JAN-2010 11:06:01	10	10	1
244217002	13-JAN-2010 11:06:01	10	10	1
244226001	13-JAN-2010 11:06:01	10	10	1
1202011854 MS (244226001)	13-JAN-2010 11:06:01	10	10	1
1202011855 MSD (244226001)	13-JAN-2010 11:06:01	10	10	1
244226002	13-JAN-2010 11:06:01	10	10	1
244236002	13-JAN-2010 11:06:01	10	10	1
244236003	13-JAN-2010 11:06:01	10	10	1
244240001	13-JAN-2010 11:06:01	10	10	1
1202011856 MS (244240001)	13-JAN-2010 11:06:01	10	10	1
1202011857 MSD (244240001)	13-JAN-2010 11:06:01	10	10	1
1202011858 ICS	13-JAN-2010 11:06:01	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202011858	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL
LCS	1202011853	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL
MS	1202011854	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL
MS	1202011856	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL
MSD	1202011855	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL
MSD	1202011857	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1236492	10	mL
RGNT	All	O2SI HPLC Grade Water	1246195	10	mL

Comments:

Desalting cartridges used: 091006-1-H & 090810-1-Ba

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GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS#2

Date: 01/15/10
Extr. Injection Volume: 20uL
Sequence Number: per011510a
Initial Calibration Date: 01/15/10

Method: EPA 6850-Modified
Int. Std.: UCL091019-03.2
Mobile Phase Lot#: 1254342, 1246195
Standard-Samp Reagent Lot#:: 1233976

Reviewed BY: HMK
Date: 01/20/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100104-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0115001a	IPB001	CWW	1/15/2010 16:54			1		USE	B
per0115002a	IPB001	CWW	1/15/2010 17:04			1		USE	B
per0115003a	WCLICAL-01	CWW	1/15/2010 17:13			1		USE	I
per0115004a	WCLICAL-02	CWW	1/15/2010 17:23			1		USE	I
per0115005a	WCLICAL-03	CWW	1/15/2010 17:33			1		USE	I
per0115006a	WCLICAL-04	CWW	1/15/2010 17:42			1		USE	I
per0115007a	WCLICAL-05	CWW	1/15/2010 17:52			1		USE	I
per0115008a	IPB002	CWW	1/15/2010 18:01			1		USE	B
per0115009a	WCLICV	CWW	1/15/2010 18:11			1		USE	C
per0115010a	IPB003	CWW	1/15/2010 18:20			1		USE	B
per0115011a	WCLCRI	CWW	1/15/2010 18:30			1		USE	C
per0115012a	1202016608	CWW	1/15/2010 18:39	942037	WS-162	1	PTQA	USE	S
per0115013a	1202016610	CWW	1/15/2010 18:49	942037	WS-162	1	PTQA	USE	S
per0115014a	244609019	CWW	1/15/2010 18:58	942037	WS-162	10	PTQA	USE	S
per0115015a	1202016609	CWW	1/15/2010 19:08	942037	WS-162	10	PTQA	USE	S
per0115016a	WCLCCV	CWW	1/15/2010 19:17			1		USE	C
per0115017a	IPB004	CWW	1/15/2010 19:27			1		USE	B
per0115018a	WCLCRI	CWW	1/15/2010 19:36			1		USE	C
per0115019a	1202016599	CWW	1/15/2010 19:46	942034	244603	1	EMAX	USE	S
per0115020a	1202016600	CWW	1/15/2010 19:56	942034	244603	1	EMAX	USE	S
per0115021a	1202016603	CWW	1/15/2010 20:05	942034	244603	1	EMAX	USE	S
per0115022a	244603001	CWW	1/15/2010 20:15	942034	244603	1	EMAX	USE	S
per0115023a	1202016601	CWW	1/15/2010 20:24	942034	244603	1	EMAX	USE	S
per0115024a	1202016602	CWW	1/15/2010 20:34	942034	244603	1	EMAX	USE	S
per0115025a	WCLCCV	CWW	1/15/2010 20:43			1		USE	C
per0115026a	IPB005	CWW	1/15/2010 20:53			1		USE	B
per0115027a	WCLCRI	CWW	1/15/2010 21:02			1		USE	C
per0115028a	1202011852	CWW	1/15/2010 21:12	940158	VARIOUS	1	LANL	USE	S
per0115029a	1202011853	CWW	1/15/2010 21:21	940158	VARIOUS	1	LANL	USE	S

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per0115030a	1202011858	CWW	1/15/2010 21:31	940158	VARIOUS	1	LANL	USE	S	
per0115031a	244129001	CWW	1/15/2010 21:41	940158	10-1132-1	1	LANL	USE	S	
per0115032a	244129002	CWW	1/15/2010 21:50	940158	10-1132-1	1	LANL	USE	S	
per0115033a	244129003	CWW	1/15/2010 22:00	940158	10-1132-1	1	LANL	USE	S	
per0115034a	244145001	CWW	1/15/2010 22:09	940158	10-1128-1	1	LANL	USE	S	
per0115035a	244149001	CWW	1/15/2010 22:19	940158	10-1147	1	LANL	USE	S	
per0115036a	244208001	CWW	1/15/2010 22:28	940158	10-1159-1	1	LANL	USE	S	
per0115037a	244208002	CWW	1/15/2010 22:38	940158	10-1159-1	1	LANL	USE	S	
per0115038a	WCLCCV	CWW	1/15/2010 22:47			1		USE	C	
per0115039a	IPB006	CWW	1/15/2010 22:57			1		USE	B	
per0115040a	WCLCRI	CWW	1/15/2010 23:07			1		USE	C	
per0115041a	244213001	CWW	1/15/2010 23:16	940158	10-1154	1	LANL	DUSE-RA	S	
per0115042a	244217001	CWW	1/15/2010 23:26	940158	10-1152	1	LANL	DUSE-RA	S	
per0115043a	244217002	CWW	1/15/2010 23:35	940158	10-1152	1	LANL	DUSE-RA	S	
per0115044a	244226001	CWW	1/15/2010 23:45	940158	10-1161	1	LANL	DUSE-RA	S	
per0115045a	1202011854	CWW	1/15/2010 23:54	940158	10-1161	1	LANL	DUSE-RA	S	
per0115046a	1202011855	CWW	1/16/2010 0:04	940158	10-1161	1	LANL	DUSE-RA	S	
per0115047a	244226002	CWW	1/16/2010 0:13	940158	10-1161	1	LANL	DUSE-RA	S	
per0115048a	244236002	CWW	1/16/2010 0:23	940158	10-1169	1	LANL	DUSE-RA	S	
per0115049a	244236003	CWW	1/16/2010 0:33	940158	10-1169	1	LANL	DUSE-RA	S	
per0115050a	WCLCCV	CWW	1/16/2010 0:42			1		~~FAIL~~ Dose	C	
per0115051a	IPB007	CWW	1/16/2010 0:52			1		USE	B	Hanke 01/20/10
per0115052a	WCLCRI	CWW	1/16/2010 1:01			1		~~USE~~ Dose	C	
per0115053a	244240001	CWW	1/16/2010 1:11	940158	10-1172	1	LANL	DUSE-RA	S	
per0115054a	1202011856	CWW	1/16/2010 1:20	940158	10-1172	1	LANL	DUSE-RA	S	
per0115055a	1202011857	CWW	1/16/2010 1:30	940158	10-1172	1	LANL	DUSE-RA	S	
per0115056a	IPB008	CWW	1/16/2010 1:39			1		USE	B	
per0115057a	1202011832	CWW	1/16/2010 1:49	940145	VARIOUS	1	LANL	DUSE-RA	S	
per0115058a	1202011833	CWW	1/16/2010 1:59	940145	VARIOUS	1	LANL	DUSE-RA	S	
per0115059a	1202011836	CWW	1/16/2010 2:08	940145	VARIOUS	1	LANL	DUSE-RA	S	
per0115060a	244222001	CWW	1/16/2010 2:18	940145	10-1150	1	LANL	DUSE-RA	S	
per0115061a	244222002	CWW	1/16/2010 2:27	940145	10-1150	1	LANL	DUSE-RA	S	
per0115062a	244222003	CWW	1/16/2010 2:37	940145	10-1150	1	LANL	DUSE-RA	S	
per0115063a	WCLCCV	CWW	1/16/2010 2:46			1		USE	C	
per0115064a	IPB009	CWW	1/16/2010 2:56			1		USE	B	
per0115065a	WCLCRI	CWW	1/16/2010 3:06			1		USE	C	
per0115066a	244222004	CWW	1/16/2010 3:15	940145	10-1150	1	LANL	USE	S	

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per0115067a	244222005	CWW	1/16/2010 3:25	940145	10-1150	1	LANL	USE	S
per0115068a	244227001	CWW	1/16/2010 3:34	940145	10-1161-1	1	LANL	USE	S
per0115069a	1202011834	CWW	1/16/2010 3:44	940145	10-1161-1	1	LANL	USE	S
per0115070a	1202011835	CWW	1/16/2010 3:53	940145	10-1161-1	1	LANL	USE	S
per0115071a	244227002	CWW	1/16/2010 4:03	940145	10-1161-1	1	LANL	USE	S
per0115072a	244227003	CWW	1/16/2010 4:13	940145	10-1161-1	1	LANL	USE	S
per0115073a	244227004	CWW	1/16/2010 4:22	940145	10-1161-1	1	LANL	USE	S
per0115074a	244227005	CWW	1/16/2010 4:32	940145	10-1161-1	1	LANL	USE	S
per0115075a	244227006	CWW	1/16/2010 4:41	940145	10-1161-1	1	LANL	USE	S
per0115076a	WCLCCV	CWW	1/16/2010 4:51			1		USE	C
per0115077a	IPB010	CWW	1/16/2010 5:00			1		USE	B
per0115078a	WCLCRI	CWW	1/16/2010 5:10			1		USE	C
per0115079a	244227007	CWW	1/16/2010 5:20	940145	10-1161-1	1	LANL	USE	S
per0115080a	244227008	CWW	1/16/2010 5:29	940145	10-1161-1	1	LANL	USE	S
per0115081a	244227009	CWW	1/16/2010 5:39	940145	10-1161-1	1	LANL	USE	S
per0115082a	244227010	CWW	1/16/2010 5:48	940145	10-1161-1	1	LANL	USE	S
per0115083a	244227011	CWW	1/16/2010 5:58	940145	10-1161-1	1	LANL	USE	S
per0115084a	244227012	CWW	1/16/2010 6:07	940145	10-1161-1	1	LANL	USE	S
per0115085a	244227013	CWW	1/16/2010 6:17	940145	10-1161-1	1	LANL	USE	S
per0115086a	244227014	CWW	1/16/2010 6:26	940145	10-1161-1	1	LANL	USE	S
per0115087a	244227015	CWW	1/16/2010 6:36	940145	10-1161-1	1	LANL	USE	S
per0115088a	WCLCCV	CWW	1/16/2010 6:46			1		USE	C
per0115089a	IPB011	CWW	1/16/2010 6:55			1		USE	B
per0115090a	WCLCRI	CWW	1/16/2010 7:05			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 01/18/10
Extr. Injection Volume: 20uL
Sequence Number: per011810a
Initial Calibration Date: 01/18/10

Method: EPA 6850-Modified
Int. Std.: UCL091019-03.2
Mobile Phase Lot#: 1254342, 1246195
Standard-Samp Reagent Lot#:: 1233976

Reviewed BY: [illegible]
Date: 01/20/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100104-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0118001a	IPB001	CWW	1/18/2010 17:15			1		USE	B
per0118002a	IPB001	CWW	1/18/2010 17:23			1		USE	B
per0118003a	WCLICAL-01	CWW	1/18/2010 17:32			1		USE	I
per0118004a	WCLICAL-02	CWW	1/18/2010 17:40			1		USE	I
per0118005a	WCLICAL-03	CWW	1/18/2010 17:49			1		USE	I
per0118006a	WCLICAL-04	CWW	1/18/2010 17:58			1		USE	I
per0118007a	WCLICAL-05	CWW	1/18/2010 18:06			1		USE	I
per0118008a	IPB002	CWW	1/18/2010 18:15			1		USE	B
per0118009a	WCLICV	CWW	1/18/2010 18:23			1		USE	C
per0118010a	IPB003	CWW	1/18/2010 18:32			1		USE	B
per0118011a	WCLCRI	CWW	1/18/2010 18:41			1		USE	C
per0118012a	244213001	CWW	1/18/2010 18:49	940158	10-1154	1	LANL	USE	S
per0118013a	244217001	CWW	1/18/2010 18:58	940158	10-1152	1	LANL	USE	S
per0118014a	244217002	CWW	1/18/2010 19:07	940158	10-1152	1	LANL	USE	S
per0118015a	244226001	CWW	1/18/2010 19:15	940158	10-1161	1	LANL	USE	S
per0118016a	1202011854	CWW	1/18/2010 19:24	940158	10-1161	1	LANL	USE	S
per0118017a	1202011855	CWW	1/18/2010 19:32	940158	10-1161	1	LANL	USE	S
per0118018a	244226002	CWW	1/18/2010 19:41	940158	10-1161	1	LANL	USE	S
per0118019a	244236002	CWW	1/18/2010 19:49	940158	10-1169	1	LANL	USE	S
per0118020a	244236003	CWW	1/18/2010 19:58	940158	10-1169	1	LANL	USE	S
per0118021a	WCLCCV	CWW	1/18/2010 20:06			1		USE	C
per0118022a	IPB004	CWW	1/18/2010 20:15			1		USE	B
per0118023a	WCLCRI	CWW	1/18/2010 20:23			1		USE	C
per0118024a	244240001	CWW	1/18/2010 20:32	940158	10-1172	1	LANL	USE	S
per0118025a	1202011856	CWW	1/18/2010 20:41	940158	10-1172	1	LANL	USE	S
per0118026a	1202011857	CWW	1/18/2010 20:49	940158	10-1172	1	LANL	USE	S
per0118027a	IPB005	CWW	1/18/2010 20:58			1		USE	B
per0118028a	1202011832	CWW	1/18/2010 21:06	940145	VARIOUS	1	LANL	USE	S
per0118029a	1202011833	CWW	1/18/2010 21:15	940145	VARIOUS	1	LANL	USE	S

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per0118030a	1202011836	CWW	1/18/2010 21:24	940145	VARIOUS	1	LANL	USE	S
per0118031a	244222001	CWW	1/18/2010 21:32	940145	10-1150	1	LANL	USE	S
per0118032a	244222002	CWW	1/18/2010 21:41	940145	10-1150	1	LANL	USE	S
per0118033a	244222003	CWW	1/18/2010 21:49	940145	10-1150	1	LANL	USE	S
per0118034a	WCLCCV	CWW	1/18/2010 21:58			1		USE	C
per0118035a	IPB006	CWW	1/18/2010 22:06			1		USE	B
per0118036a	WCLCRI	CWW	1/18/2010 22:15			1		USE	C
per0118037a	1202011812	CWW	1/18/2010 22:24	940136	10-1132	1	LANL	USE	S
per0118038a	1202011813	CWW	1/18/2010 22:33	940136	10-1132	1	LANL	USE	S
per0118039a	1202011818	CWW	1/18/2010 22:41	940136	10-1132	1	LANL	USE	S
per0118040a	244128001	CWW	1/18/2010 22:50	940136	10-1132	1	LANL	USE	S
per0118041a	1202011814	CWW	1/18/2010 22:58	940136	10-1132	1	LANL	USE	S
per0118042a	1202011815	CWW	1/18/2010 23:07	940136	10-1132	1	LANL	USE	S
per0118043a	244128002	CWW	1/18/2010 23:15	940136	10-1132	1	LANL	USE	S
per0118044a	244128003	CWW	1/18/2010 23:24	940136	10-1132	1	LANL	USE	S
per0118045a	244128004	CWW	1/18/2010 23:32	940136	10-1132	1	LANL	USE	S
per0118046a	WCLCCV	CWW	1/18/2010 23:41			1		USE	C
per0118047a	IPB007	CWW	1/18/2010 23:50			1		USE	B
per0118048a	WCLCRI	CWW	1/18/2010 23:58			1		USE	C
per0118049a	244128005	CWW	1/19/2010 0:07	940136	10-1132	1	LANL	USE	S
per0118050a	244128006	CWW	1/19/2010 0:15	940136	10-1132	1	LANL	USE	S
per0118051a	244128007	CWW	1/19/2010 0:24	940136	10-1132	1	LANL	USE	S
per0118052a	244128008	CWW	1/19/2010 0:32	940136	10-1132	1	LANL	USE	S
per0118053a	244128009	CWW	1/19/2010 0:41	940136	10-1132	1	LANL	USE	S
per0118054a	244128010	CWW	1/19/2010 0:50	940136	10-1132	1	LANL	USE	S
per0118055a	244128011	CWW	1/19/2010 0:58	940136	10-1132	1	LANL	USE	S
per0118056a	244128012	CWW	1/19/2010 1:07	940136	10-1132	1	LANL	USE	S
per0118057a	WCLCCV	CWW	1/19/2010 1:15			1		USE	C
per0118058a	IPB008	CWW	1/19/2010 1:24			1		USE	B
per0118059a	WCLCRI	CWW	1/19/2010 1:33			1		USE	C
per0118060a	244128013	CWW	1/19/2010 1:41	940136	10-1132	1	LANL	USE	S
per0118061a	244128014	CWW	1/19/2010 1:50	940136	10-1132	1	LANL	USE	S
per0118062a	244128015	CWW	1/19/2010 1:59	940136	10-1132	1	LANL	USE	S
per0118063a	244128016	CWW	1/19/2010 2:07	940136	10-1132	1	LANL	USE	S
per0118064a	244128017	CWW	1/19/2010 2:16	940136	10-1132	1	LANL	USE	S
per0118065a	244128018	CWW	1/19/2010 2:24	940136	10-1132	1	LANL	USE	S
per0118066a	244128019	CWW	1/19/2010 2:33	940136	10-1132	1	LANL	USE	S

per0118067a	244128020	CWW	1/19/2010 2:41	940136	10-1132	1	LANL	USE	S
per0118068a	WCLCCV	CWW	1/19/2010 2:50			1		USE	C
per0118069a	IPB009	CWW	1/19/2010 2:59			1		USE	B
per0118070a	WCLCRI	CWW	1/19/2010 3:07			1		USE	C

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Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1161-1

Method/Analysis Information

Procedure:	**Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**
Analytical Method:	SW846 6850 Modified
Prep Method:	SW846 6850 Modified
Analytical Batch Number:	940145
Prep Batch Number:	940143

Sample Analysis

Sample ID	Client ID
244227001	RE12-10-7734
244227002	RE12-10-7701
244227003	RE12-10-7702
244227004	RE12-10-7700
244227005	RE12-10-7699
244227006	RE12-10-7727
244227007	RE12-10-7710
244227008	RE12-10-7715
244227009	RE12-10-7707
244227010	RE12-10-7719
244227011	RE12-10-7717
244227012	RE12-10-7708
244227013	RE12-10-7706
244227014	RE12-10-7714

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244227015	RE12-10-7705
1202011836	Interference Check Sample (ICS)
1202011832	Method Blank (MB)
1202011833	Laboratory Control Sample (LCS)
1202011834	244227001(RE12-10-7734) Matrix Spike (MS)
1202011835	244227001(RE12-10-7734) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

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QC Sample Designation
Sample 244227001 (RE12-10-7734) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

Retention Time
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Samples 1202011832 (MB), 1202011833 (LCS) and 1202011836 (ICS) were re-analyzed due to a CVS failing acceptance criteria. The re-analysis passed acceptance criteria and is reported.

Miscellaneous Information

Data Exception (DER) Documentation
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

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Method Comments
The samples in this SDG were not originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Herbert M Mauer **Date:** 01/21/10

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7734

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227001

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.5

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.535	2.14	0.535	ug/kg	U	1	16-JAN-10 03:34	per0115068a
	Perchlorate Isotope Ratio						1	16-JAN-10 03:34	per0115068a
14797-73-0	Perchlorate-101	.535	2.14	0.535	ug/kg	U	1	16-JAN-10 03:34	per0115068a
	Perchlorate-O(18)			4.82	ug/kg		1	16-JAN-10 03:34	per0115068a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7701

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227002

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.672	2.69	0.672	ug/kg	U	1	16-JAN-10 04:03	per0115071a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:03	per0115071a
14797-73-0	Perchlorate-101	.672	2.69	0.672	ug/kg	U	1	16-JAN-10 04:03	per0115071a
	Perchlorate-O(18)			6.19	ug/kg		1	16-JAN-10 04:03	per0115071a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7702

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227003

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.588	2.35	0.588	ug/kg	U	1	16-JAN-10 04:13	per0115072a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:13	per0115072a
14797-73-0	Perchlorate-101	.588	2.35	0.588	ug/kg	U	1	16-JAN-10 04:13	per0115072a
	Perchlorate-O(18)			5.50	ug/kg		1	16-JAN-10 04:13	per0115072a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7700

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227004

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.7

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 04:22	per0115073a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:22	per0115073a
14797-73-0	Perchlorate-101	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 04:22	per0115073a
	Perchlorate-O(18)			5.49	ug/kg		1	16-JAN-10 04:22	per0115073a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7699

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227005

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 80

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.628	2.51	0.710	ug/kg	J	1	16-JAN-10 04:32	per0115074a
	Perchlorate Isotope Ratio			3.42			1	16-JAN-10 04:32	per0115074a
14797-73-0	Perchlorate-101	.628	2.51	0.641	ug/kg	J	1	16-JAN-10 04:32	per0115074a
	Perchlorate-O(18)			6.20	ug/kg		1	16-JAN-10 04:32	per0115074a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7727

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227006

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.669	2.68	0.669	ug/kg	U	1	16-JAN-10 04:41	per0115075a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:41	per0115075a
14797-73-0	Perchlorate-101	.669	2.68	0.669	ug/kg	U	1	16-JAN-10 04:41	per0115075a
	Perchlorate-O(18)			6.38	ug/kg		1	16-JAN-10 04:41	per0115075a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7710

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227007

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 05:20	per0115079a
	Perchlorate Isotope Ratio						1	16-JAN-10 05:20	per0115079a
14797-73-0	Perchlorate-101	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 05:20	per0115079a
	Perchlorate-O(18)			5.10	ug/kg		1	16-JAN-10 05:20	per0115079a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7715

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227008

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	2.09	ug/kg	J	1	16-JAN-10 05:29	per0115080a
	Perchlorate Isotope Ratio			3.06			1	16-JAN-10 05:29	per0115080a
14797-73-0	Perchlorate-101	.675	2.7	2.12	ug/kg	J	1	16-JAN-10 05:29	per0115080a
	Perchlorate-O(18)			6.67	ug/kg		1	16-JAN-10 05:29	per0115080a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7707

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227009

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 79

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.636	2.54	0.636	ug/kg	U	1	16-JAN-10 05:39	per0115081a
	Perchlorate Isotope Ratio						1	16-JAN-10 05:39	per0115081a
14797-73-0	Perchlorate-101	.636	2.54	0.636	ug/kg	U	1	16-JAN-10 05:39	per0115081a
	Perchlorate-O(18)			6.03	ug/kg		1	16-JAN-10 05:39	per0115081a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7719

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227010

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.6	2.4	0.621	ug/kg	J	1	16-JAN-10 05:48	per0115082a
	Perchlorate Isotope Ratio			2.85			1	16-JAN-10 05:48	per0115082a
14797-73-0	Perchlorate-101	.6	2.4	0.674	ug/kg	J	1	16-JAN-10 05:48	per0115082a
	Perchlorate-O(18)			6.21	ug/kg		1	16-JAN-10 05:48	per0115082a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7717

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227011

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.612	2.45	0.612	ug/kg	U	1	16-JAN-10 05:58	per0115083a
	Perchlorate Isotope Ratio						1	16-JAN-10 05:58	per0115083a
14797-73-0	Perchlorate-101	.612	2.45	0.612	ug/kg	U	1	16-JAN-10 05:58	per0115083a
	Perchlorate-O(18)			5.51	ug/kg		1	16-JAN-10 05:58	per0115083a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7708

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227012

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 96.8

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.517	2.07	0.517	ug/kg	U	1	16-JAN-10 06:07	per0115084a
	Perchlorate Isotope Ratio						1	16-JAN-10 06:07	per0115084a
14797-73-0	Perchlorate-101	.517	2.07	0.517	ug/kg	U	1	16-JAN-10 06:07	per0115084a
	Perchlorate-O(18)			4.88	ug/kg		1	16-JAN-10 06:07	per0115084a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7706

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227013

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	0.557	ug/kg	U	1	16-JAN-10 06:17	per0115085a
	Perchlorate Isotope Ratio						1	16-JAN-10 06:17	per0115085a
14797-73-0	Perchlorate-101	.557	2.23	0.557	ug/kg	U	1	16-JAN-10 06:17	per0115085a
	Perchlorate-O(18)			5.67	ug/kg		1	16-JAN-10 06:17	per0115085a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7714

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227014

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 90.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.612	ug/kg	J	1	16-JAN-10 06:26	per0115086a
	Perchlorate Isotope Ratio			3.14			1	16-JAN-10 06:26	per0115086a
14797-73-0	Perchlorate-101	.553	2.21	0.601	ug/kg	J	1	16-JAN-10 06:26	per0115086a
	Perchlorate-O(18)			5.29	ug/kg		1	16-JAN-10 06:26	per0115086a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7705

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227015

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.597	2.39	0.597	ug/kg	U	1	16-JAN-10 06:36	per0115087a
	Perchlorate Isotope Ratio						1	16-JAN-10 06:36	per0115087a
14797-73-0	Perchlorate-101	.597	2.39	0.597	ug/kg	U	1	16-JAN-10 06:36	per0115087a
	Perchlorate-O(18)			5.66	ug/kg		1	16-JAN-10 06:36	per0115087a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1161–1

Extract Batch Code: 940143

Date Filtered: 15–JAN–10

Matrix: SOIL

Sample ID: 1202011833

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	1.94	ug/kg	96.9		70 – 130
Perchlorate Isotope Ratio		3.15				–
Perchlorate–101	2.00	1.87	ug/kg	93.5		70 – 130
Perchlorate–O(18)		4.8	ug/kg			–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1161–1

Extract Batch Code: 940143

Date Filtered: 15–JAN–10

Matrix: SOIL

Sample ID: 1202011836

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.05	ug/kg	102		70 – 130
Perchlorate Isotope Ratio		2.99				
Perchlorate–101	2.00	2.08	ug/kg	104		70 – 130
Perchlorate–O(18)		4.91	ug/kg			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

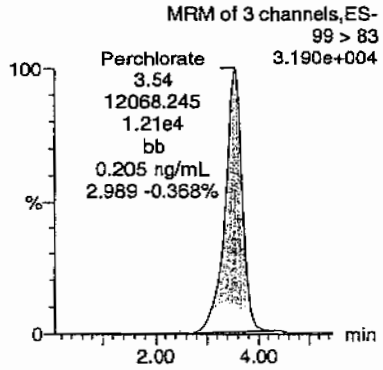
Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118030a
Date: 18-Jan-2010
Time: 21:24:03
ID: 1202011836
Vial: 1:5,C

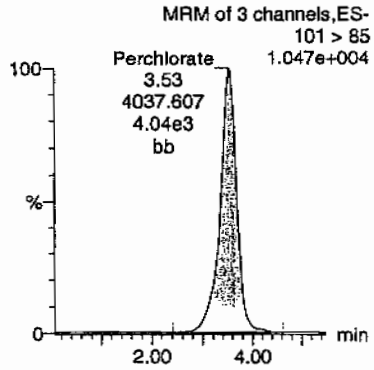
|LANL|940145|SOLID|ICS|1|NA

01-19-10

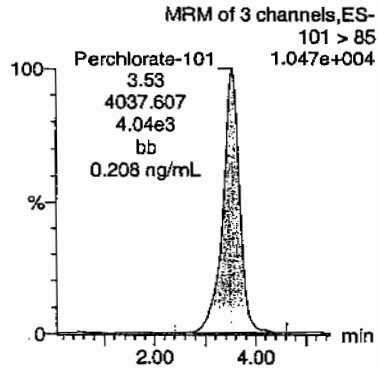
Perchlorate



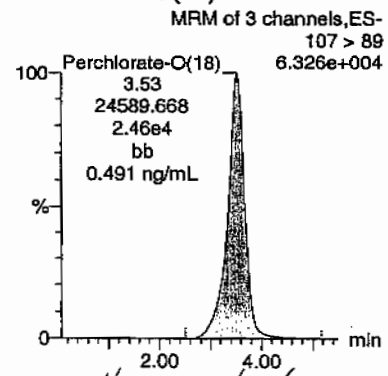
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202011836	Perchlorate	99 > 83	3.54	12068.245	12068.245	bb			0.2045	102.27	2.27	1714.9...	2.99
1202011836	Perchlorate-101	101 > 85	3.53	4037.607	4037.607	bb			0.2075	103.77	3.77	1123.7...	
1202011836	Perchlorate-O(18)	107 > 89	3.53	24589.668	24589.668	bb			0.4911	98.23	-1.77	6525.3...	

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–1161–1

Extract Batch Code: 940143

Date Extracted: 15–JAN–10

GEL MS/PS ID: 1202011834

Client ID: RE12–10–7734

GEL MSD/PSD ID: 1202011835

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.14	0.0742	ug/kg	2.07	93.2	2.11	95	1.9	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.04		3.11		0		–
Perchlorate–101	2.14	0.0618	ug/kg	2.10	95.4	2.09	94.9	.51	30	75 – 125
Perchlorate–O(18)	0	4.82	ug/kg	5.08		4.95		2.6		–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1161–1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	15–JAN–10	per0115001a	IPB001
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115001a	IPB001
Perchlorate	0.00	0	NA	15–JAN–10	per0115002a	IPB001
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115002a	IPB001
Perchlorate	0.00	0	NA	18–JAN–10	per0118001a	IPB001
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118001a	IPB001
Perchlorate	0.00	0	NA	18–JAN–10	per0118002a	IPB001
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118002a	IPB001

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

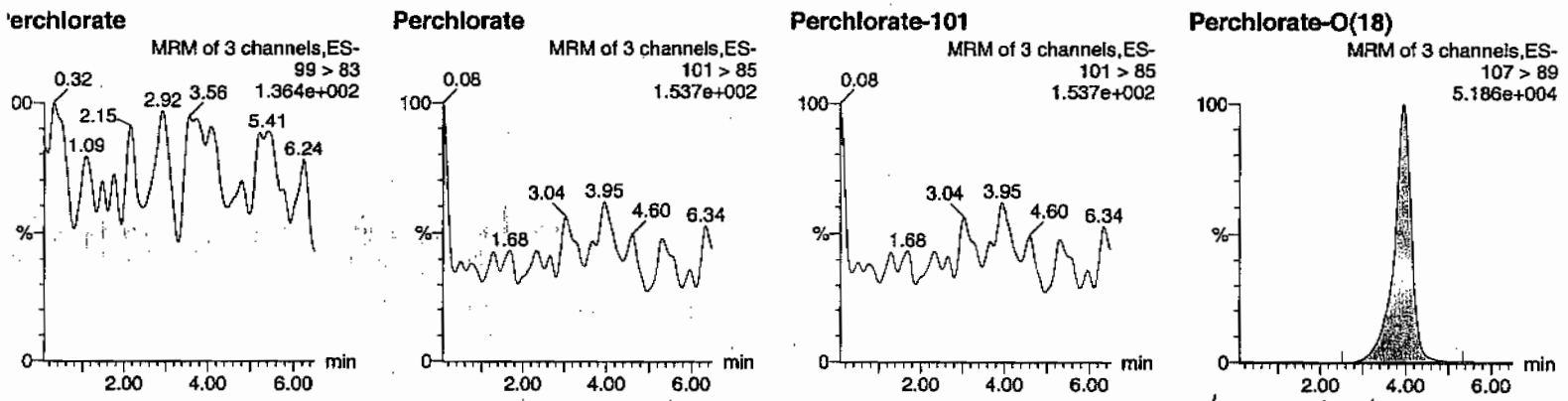
Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per011510a.mdb 18 Jan 2010 08:43:34
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011510a.cdb 18 Jan 2010 08:43:48

Name: per0115001a
Date: 15-Jan-2010
Time: 16:54:54
ID: IPB001
Vial: 1:1,A

CWW 01-18-10



HMC 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	3.97	24245.881	24245.881	bb			0.5027	100.55	0.55	1380.2...	

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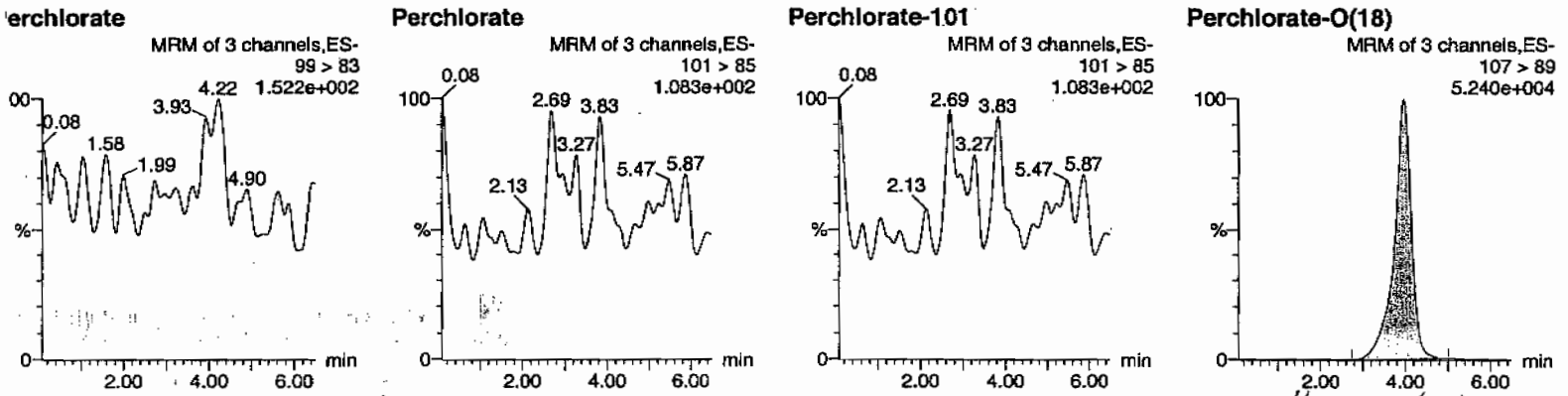
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Name: per0115002a
Date: 15-Jan-2010
Time: 17:04:26
ID: IPB001
Vial: 1:1,A

CWW 01-18-10



HMW 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B001	Perchlorate	99 > 83											0.00
B001	Perchlorate-101	101 > 85											
B001	Perchlorate-O(18)	107 > 89	3.98	24126.238	24126.238	bb			0.5002	100.05	0.05	2526.4...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per011810a.mdb 19 Jan 2010 07:54:21
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011810a.cdb 19 Jan 2010 07:54:38

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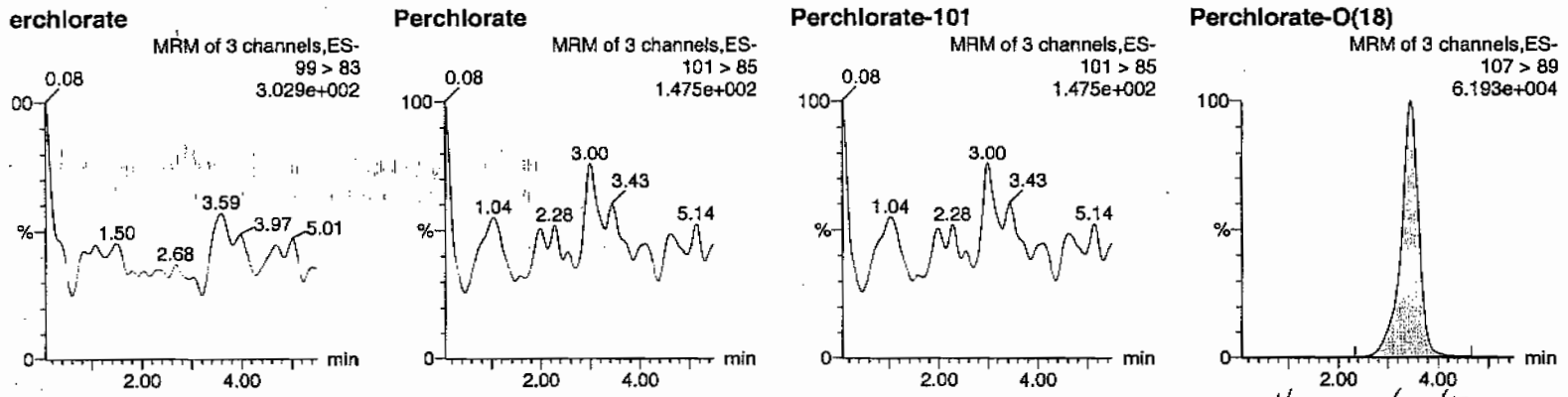
Date: 18-Jan-2010
Time: 17:15:12
ID: IPB001
Vial: 1:1,A

CWW
01-19-10



HNM 01/20/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	3.47	25658.814	25658.814	bb			0.5125	102.50	2.50	360.946	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

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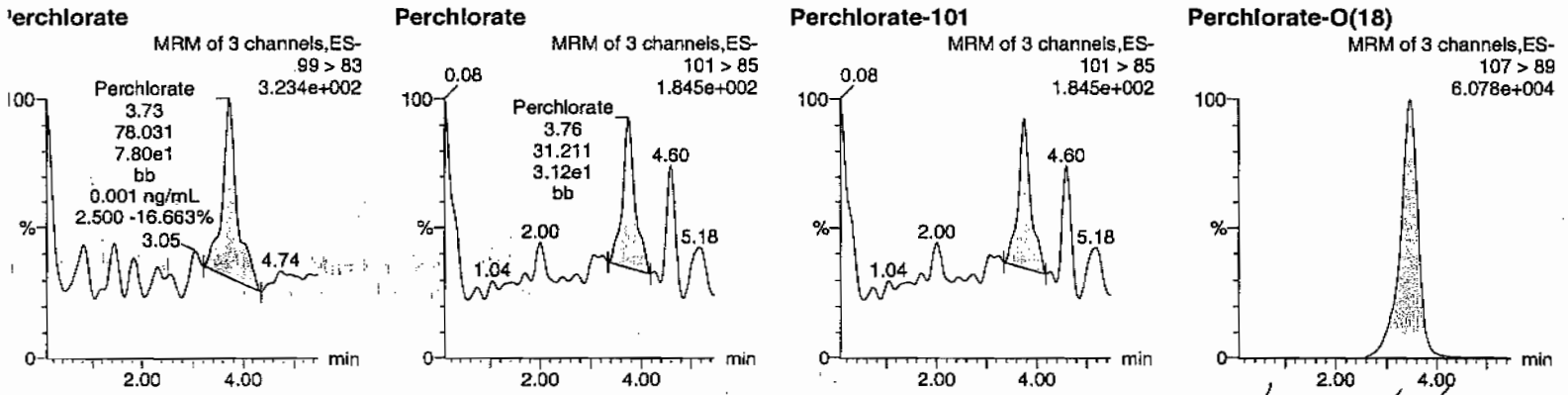
Date: 18-Jan-2010
Time: 17:23:45
ID: IPB001
Vial: 1:1,A

CWW 01-19-10



Anne 01/20/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB001	Perchlorate	99 > 83	3.73	78.031	78.031	bb			0.0013			10.085	2.50
PB001	Perchlorate-101	101 > 85	3.76	31.211	31.211	bb			0.0016			11.802	
PB001	Perchlorate-O(18)	107 > 89	3.47	25199.514	25199.514	bb			0.5033	100.66	0.66	2725.7...	

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1161–1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	15–JAN–10	per0115008a	IPB002
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115008a	IPB002
Perchlorate	0.00	0	NA	15–JAN–10	per0115010a	IPB003
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115010a	IPB003
Perchlorate	0.00	0	NA	15–JAN–10	per0115017a	IPB004
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115017a	IPB004
Perchlorate	0.00	0	NA	15–JAN–10	per0115026a	IPB005
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115026a	IPB005
Perchlorate	0.00	0	NA	15–JAN–10	per0115039a	IPB006
Perchlorate–101	0.00	0	NA	15–JAN–10	per0115039a	IPB006
Perchlorate	0.00	0	NA	16–JAN–10	per0115051a	IPB007
Perchlorate–101	0.00	0	NA	16–JAN–10	per0115051a	IPB007
Perchlorate	0.00	0	NA	16–JAN–10	per0115064a	IPB009

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1161–1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate–101	0.00	0	NA	16–JAN–10	per0115064a	IPB009
Perchlorate	0.00	0	NA	16–JAN–10	per0115077a	IPB010
Perchlorate–101	0.00	0	NA	16–JAN–10	per0115077a	IPB010
Perchlorate	0.00	0	NA	16–JAN–10	per0115089a	IPB011
Perchlorate–101	0.00	0	NA	16–JAN–10	per0115089a	IPB011
Perchlorate	0.00	0	NA	18–JAN–10	per0118008a	IPB002
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118008a	IPB002
Perchlorate	0.00	0	NA	18–JAN–10	per0118010a	IPB003
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118010a	IPB003
Perchlorate	0.00	0	NA	18–JAN–10	per0118022a	IPB004
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118022a	IPB004
Perchlorate	0.00	0	NA	18–JAN–10	per0118027a	IPB005
Perchlorate–101	0.00	0	NA	18–JAN–10	per0118027a	IPB005

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1161-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	18-JAN-10	per0118035a	IPB006
Perchlorate-101	0.00	0	NA	18-JAN-10	per0118035a	IPB006

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

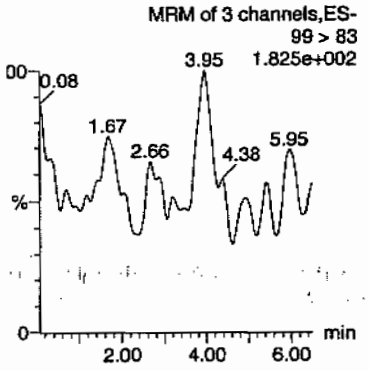
ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

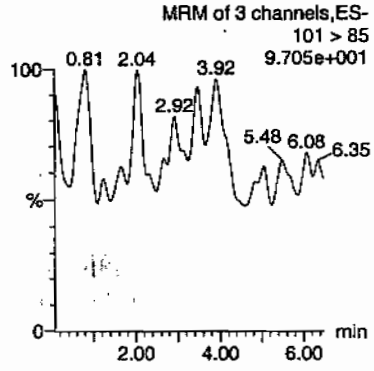
ame: per0115008a
ate: 15-Jan-2010
ime: 18:01:34
): IPB002
lal: 1:1,A

AW 01-18-10

erchlorate



Perchlorate



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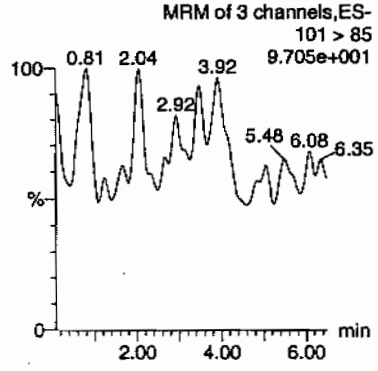

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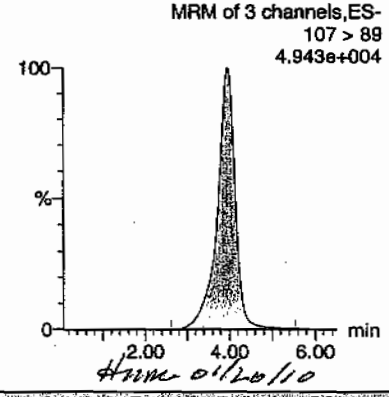

HMM 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B002	Perchlorate	99 > 83											0.00
B002	Perchlorate-101	101 > 85											
B002	Perchlorate-O(18)	107 > 89	3.95	23728.619	23728.619	bb			0.4920	98.40	-1.60	1073.2...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

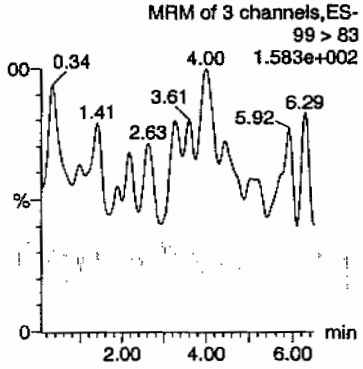
Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

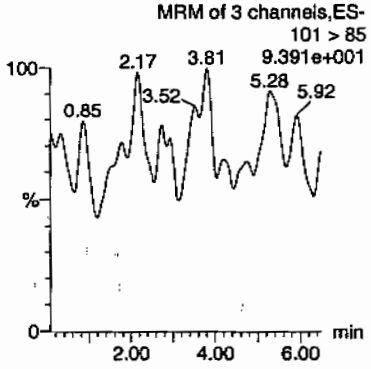
Name: per0115010a
Date: 15-Jan-2010
Time: 18:20:39
ID: IPB003
Vial: 1:1,A

01-18-10

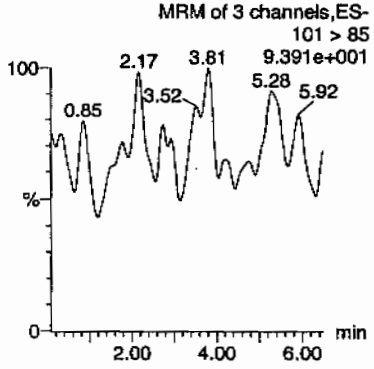
Perchlorate



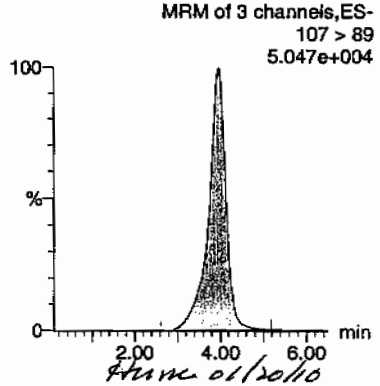
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hume 01/20/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	3.95	23370.221	23370.221	bb			0.4846	96.91	-3.09	2094.0...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

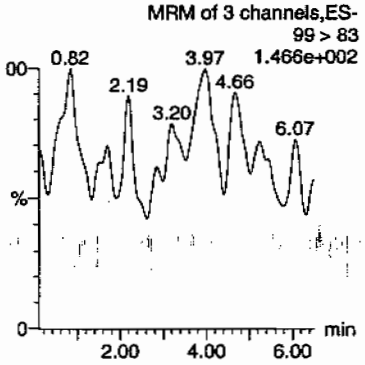
ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

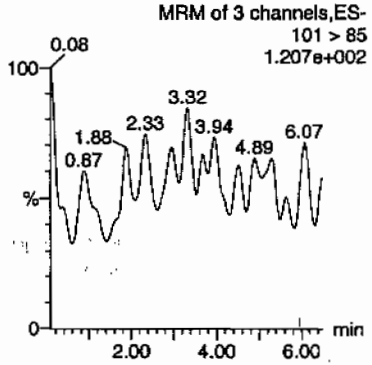
ame: per0115017a
ate: 15-Jan-2010
ime: 19:27:27
): IPB004
ial: 1:1,A

01-18-10

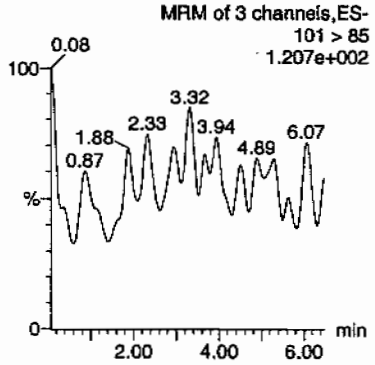
erchlorate



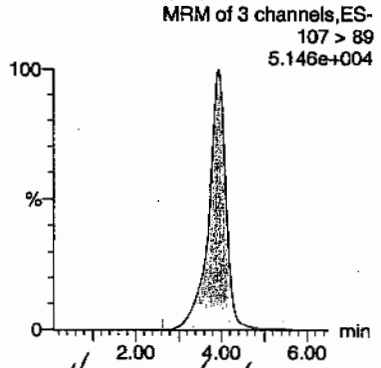
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmc 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB004	Perchlorate	99 > 83											0.00
PB004	Perchlorate-101	101 > 85											
PB004	Perchlorate-O(18)	107 > 89	3.93	23882.883	23882.883	bb			0.4952	99.04	-0.96	4428.4...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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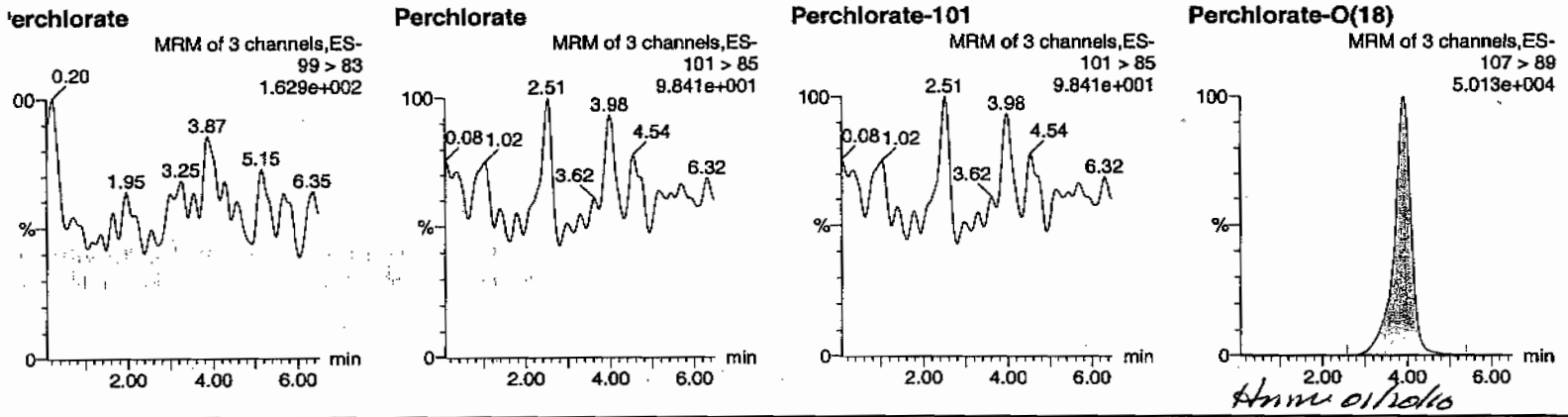
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Name: per0115026a
Date: 15-Jan-2010
Time: 20:53:19
ID: IPB005
Vial: 1:1,A

CW
01-18-10



Hmm 01/20/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N Ion Ratio
IPB005	Perchlorate	99 > 83										0.00
IPB005	Perchlorate-101	101 > 85										
IPB005	Perchlorate-O(18)	107 > 89	3.92	23051.479	23051.479	bb			0.4780	95.59	-4.41	581.734

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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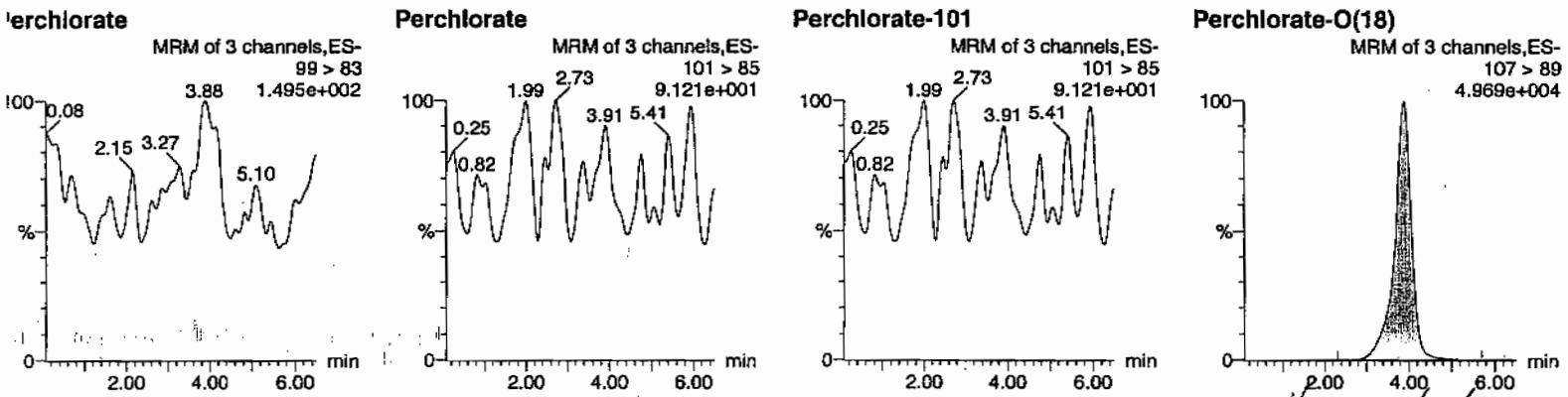
Date: 15-Jan-2010
Time: 22:57:27
ID: IPB006
Vial: 1:1,A

aw 01-18-10



HMW 01/20/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB006	Perchlorate	99 > 83											0.00
PB006	Perchlorate-101	101 > 85											
PB006	Perchlorate-O(18)	107 > 89	3.89	22828.760	22828.760	bb			0.4733	94.67	-5.33	3583.8...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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Date: 16-Jan-2010
Time: 00:52:10
ID: IPB007
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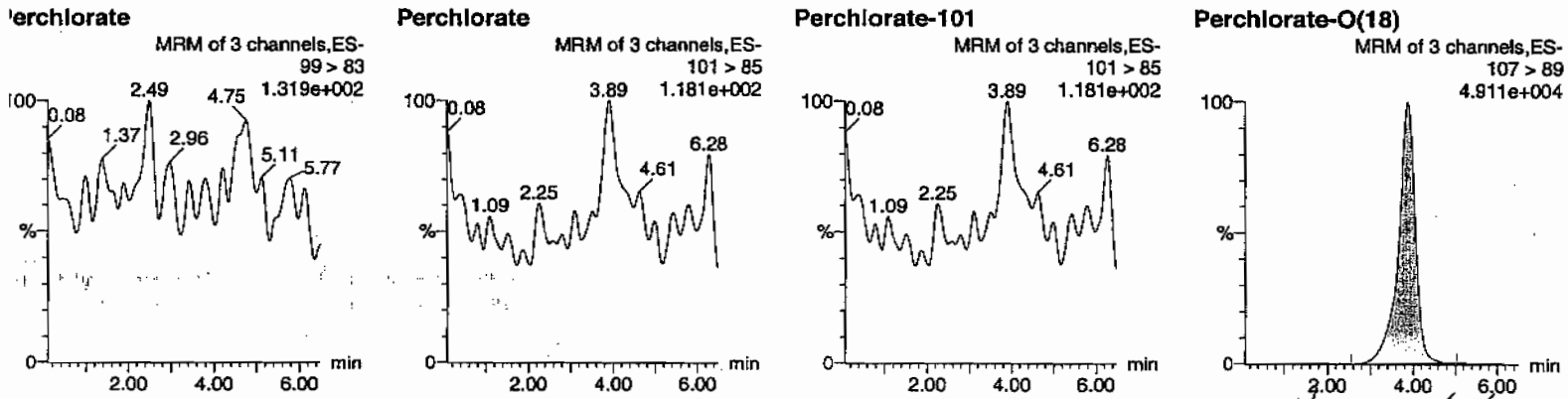
Cwo
01-18-10



Hmw 01/20/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB007	Perchlorate	99 > 83											0.00
PB007	Perchlorate-101	101 > 85											
PB007	Perchlorate-O(18)	107 > 89	3.88	22347.949	22347.949	bb			0.4634	92.67	-7.33	2761.0...	

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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ate: 16-Jan-2010
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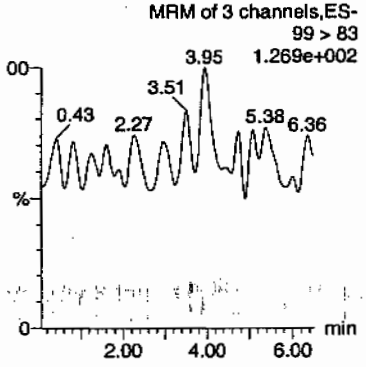
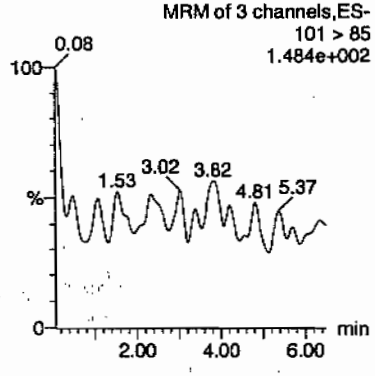
ial: 1:1,A

cw
9-18-10

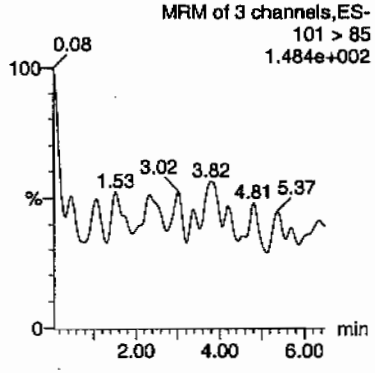
erchlorate



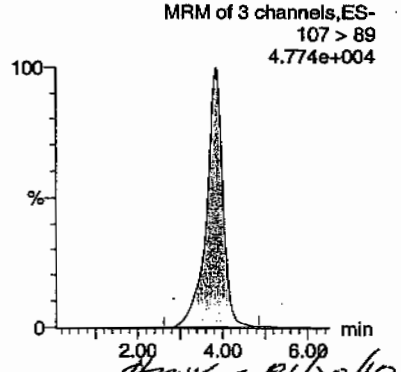
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB009	Perchlorate	99 > 83											0.00
PB009	Perchlorate-101	101 > 85											
PB009	Perchlorate-O(18)	107 > 89	3.86	21237.418	21237.418	bb			0.4403	88.07	-11.93	2034.1...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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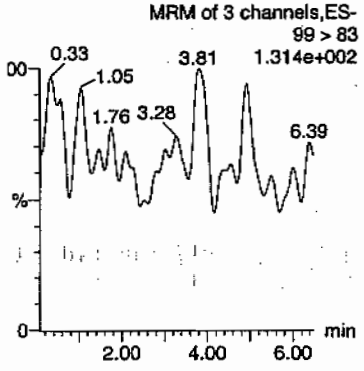
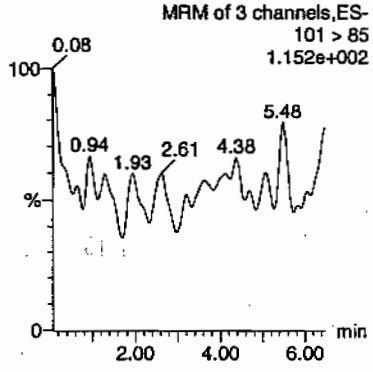
ate: 16-Jan-2010
ime: 05:00:58
): IPB010
ial: 1:1,A

Cmw
01-18-10

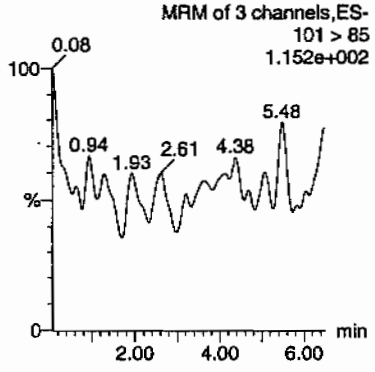
erchlorate



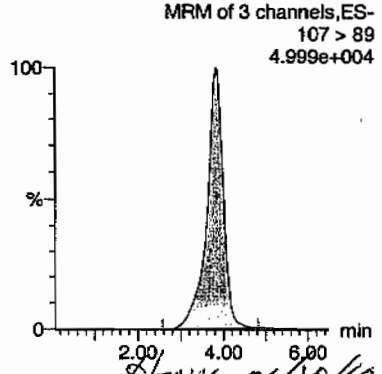
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'B010	Perchlorate	99 > 83											0.00
'B010	Perchlorate-101	101 > 85											
'B010	Perchlorate-O(18)	107 > 89	3.83	22161.385	22161.385	bb			0.4595	91.90	-8.10	514.957	

luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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ate: 16-Jan-2010
ime: 06:55:52
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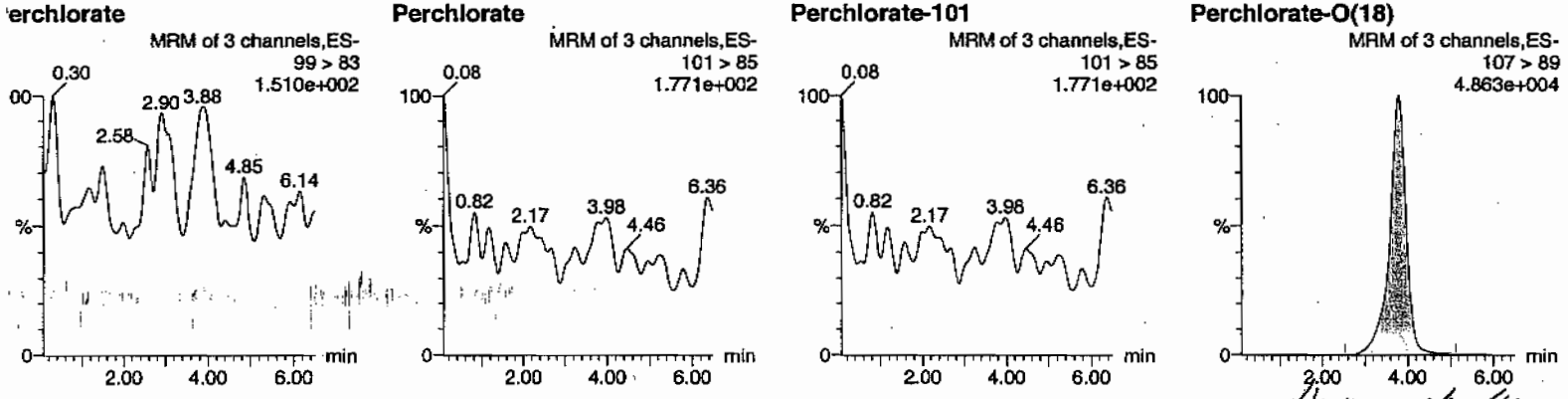
ial: 1:1,A

01-18-10



Hm-01/20/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB011	Perchlorate	99 > 83											0.00
PB011	Perchlorate-101	101 > 85											
PB011	Perchlorate-O(18)	107 > 89	3.79	21681.219	21681.219	bb			0.4495	89.91	-10.09	3193.9...	

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

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ate: 18-Jan-2010
ime: 18:15:15
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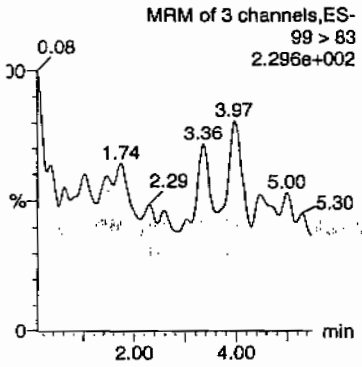
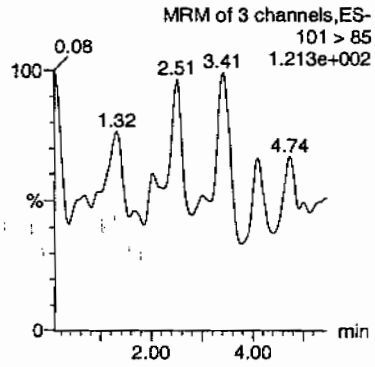
ial: 1:1,A

CWW
01-19-10

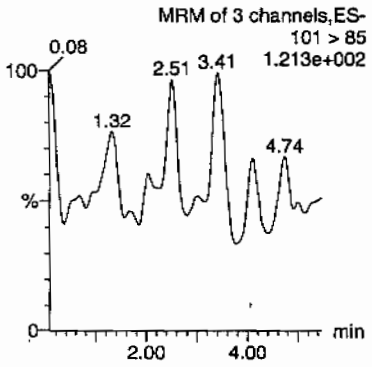
erchlorate



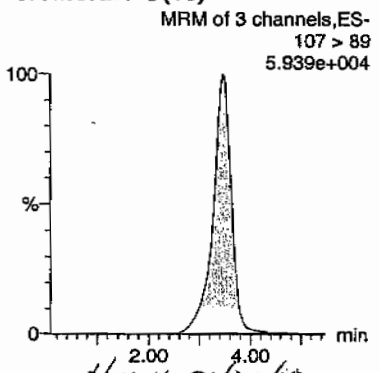
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B002	Perchlorate	99 > 83											0.00
B002	Perchlorate-101	101 > 85											
B002	Perchlorate-O(18)	107 > 89	3.47	24661.912	24661.912	bb			0.4926	98.52	-1.48	1912.5...	

:L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

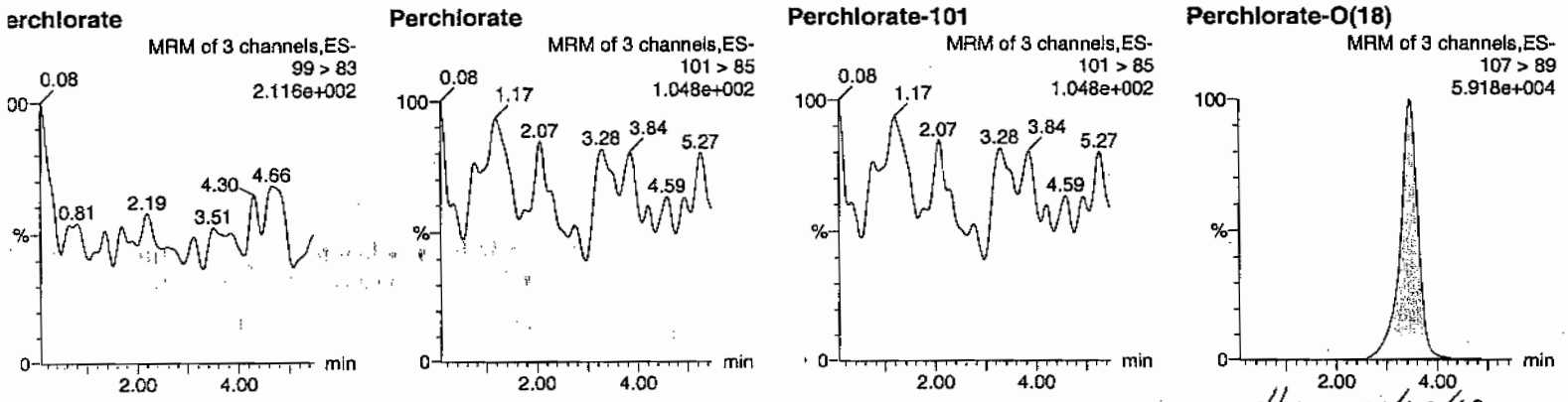
uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ame: per0118010a
ate: 18-Jan-2010
ime: 18:32:35
): IPB003
ial: 1:1,A

CWW
01-19-10



Hmw 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B003	Perchlorate	99 > 83											0.00
B003	Perchlorate-101	101 > 85											
B003	Perchlorate-O(18)	107 > 89	3.46	24207.375	24207.375	bb			0.4835	96.70	-3.30	3975.1...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

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rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

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ate: 18-Jan-2010
ime: 20:15:28
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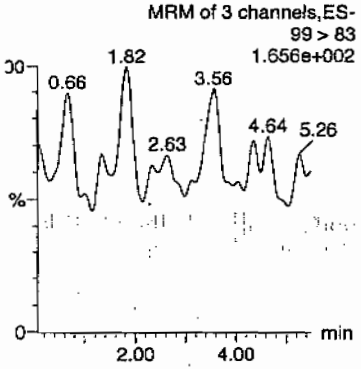
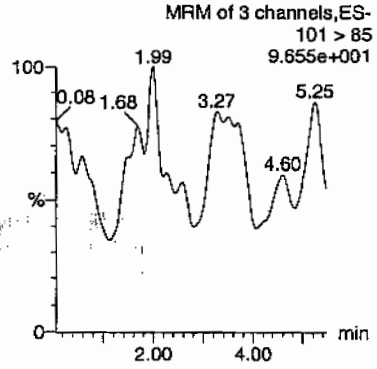
ial: 1:1,A

CMP 01-19-10

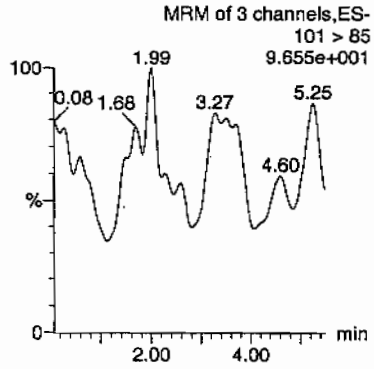
erchlorate



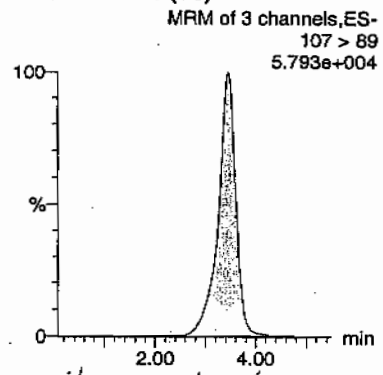
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmw 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B004	Perchlorate	99 > 83											0.00
B004	Perchlorate-101	101 > 85											
B004	Perchlorate-O(18)	107 > 89	3.45	23594.861	23594.861	bb			0.4713	94.25	-5.75	7510.4...	

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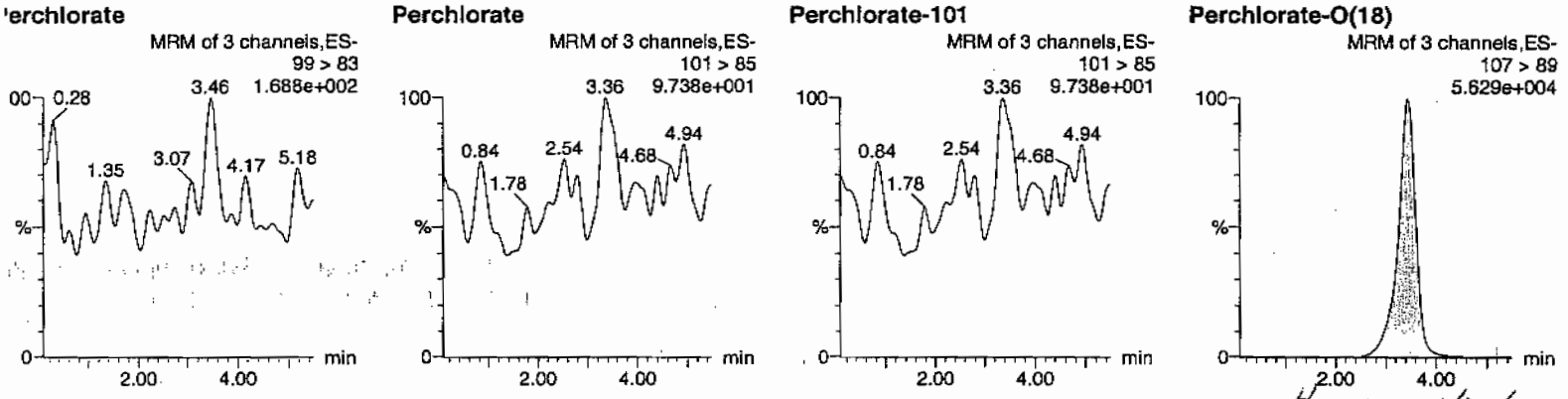
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

Last Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
Printed: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

Name: per0118027a
Date: 18-Jan-2010
Time: 20:58:15
ID: IPB005
Vial: 1:1,A

CW 01-19-10



Hmm 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83											0.00
IPB005	Perchlorate-101	101 > 85											
IPB005	Perchlorate-O(18)	107 > 89	3.45	23187.441	23187.441	bb			0.4631	92.63	-7.37	6286.8...	

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

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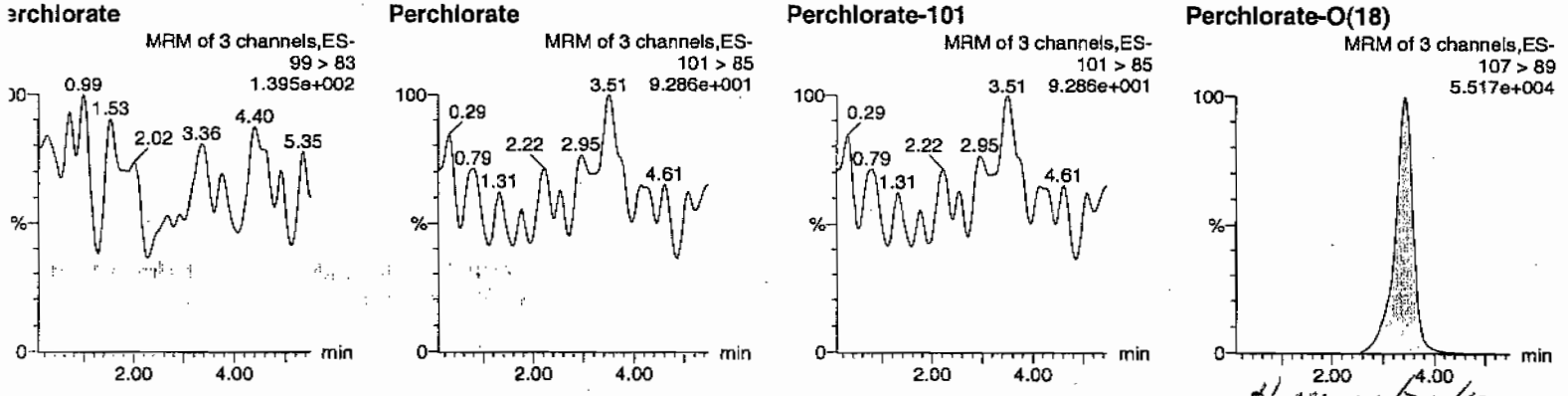
ate: 18-Jan-2010
me: 22:06:53
: IPB006
al: 1:1,A

CWW 01-18-10



HMM 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B006	Perchlorate	99 > 83											0.00
B006	Perchlorate-101	101 > 85											
B006	Perchlorate-O(18)	107 > 89	3.42	22622.916	22622.916	bb			0.4519	90.37	-9.63	2897.7...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/RbI (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
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; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
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; 2571.1918	100
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; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

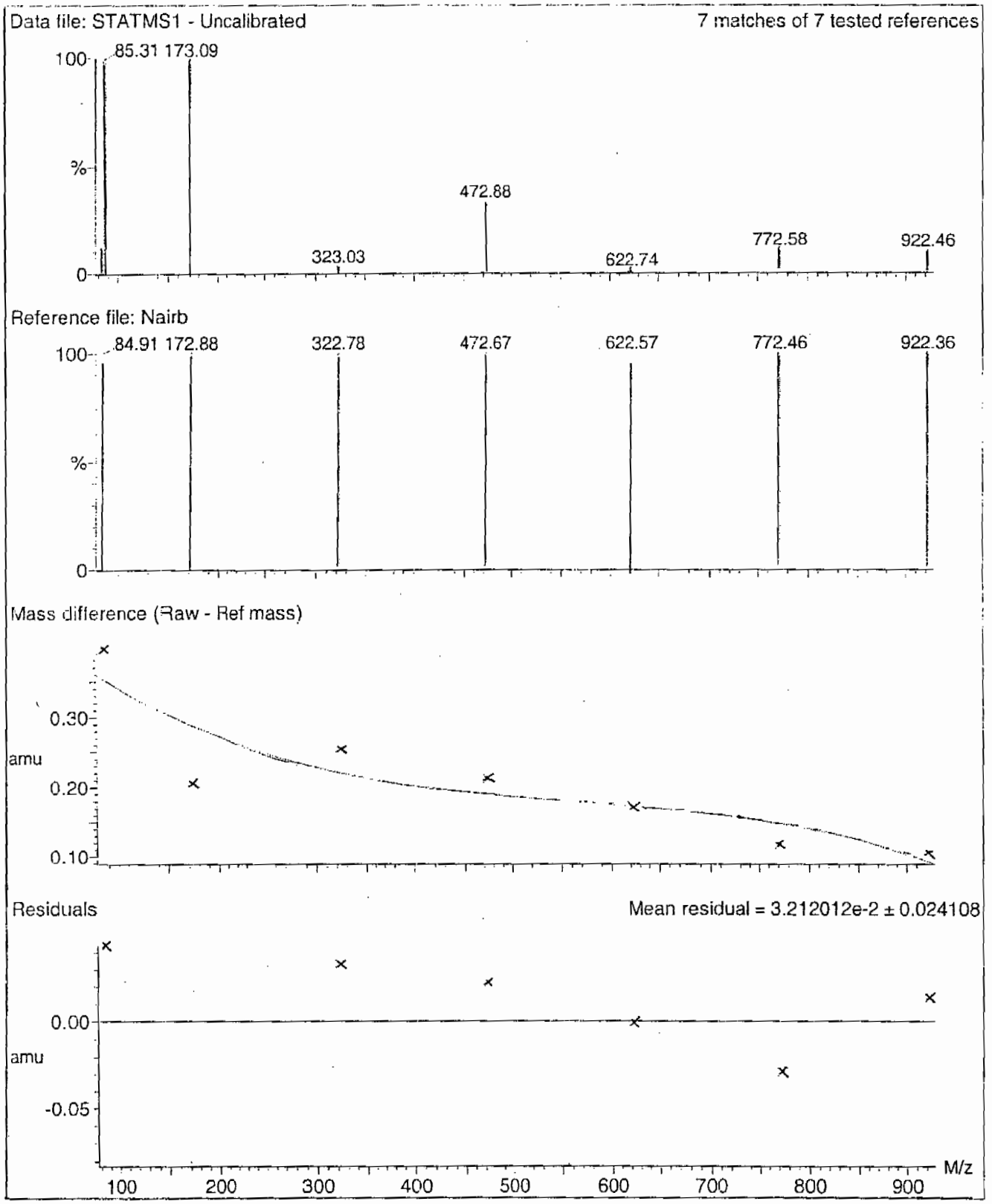
PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

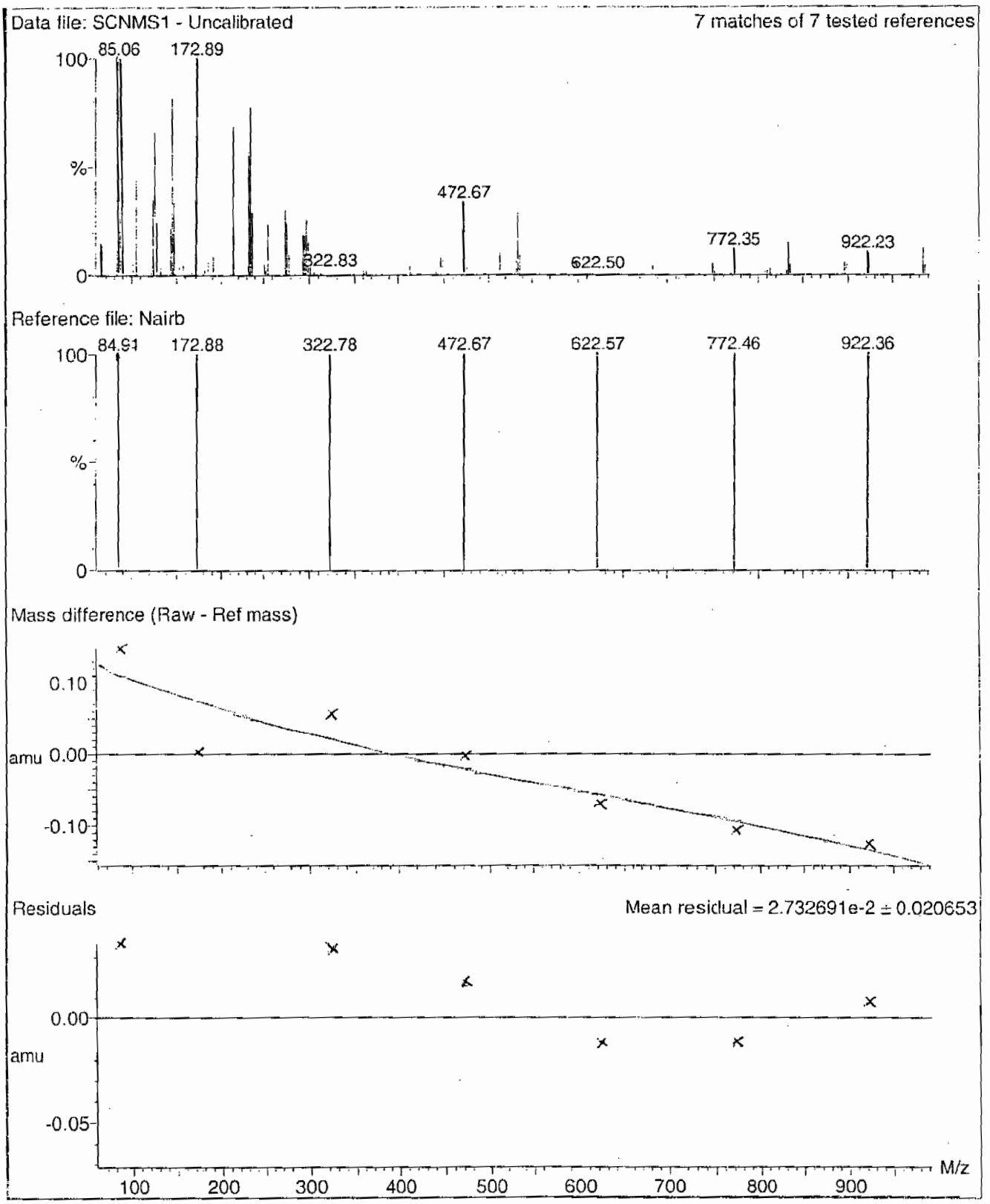
PEAKS HIGHLIGHTED BY CWJ 01-09-03



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS1 Scanning

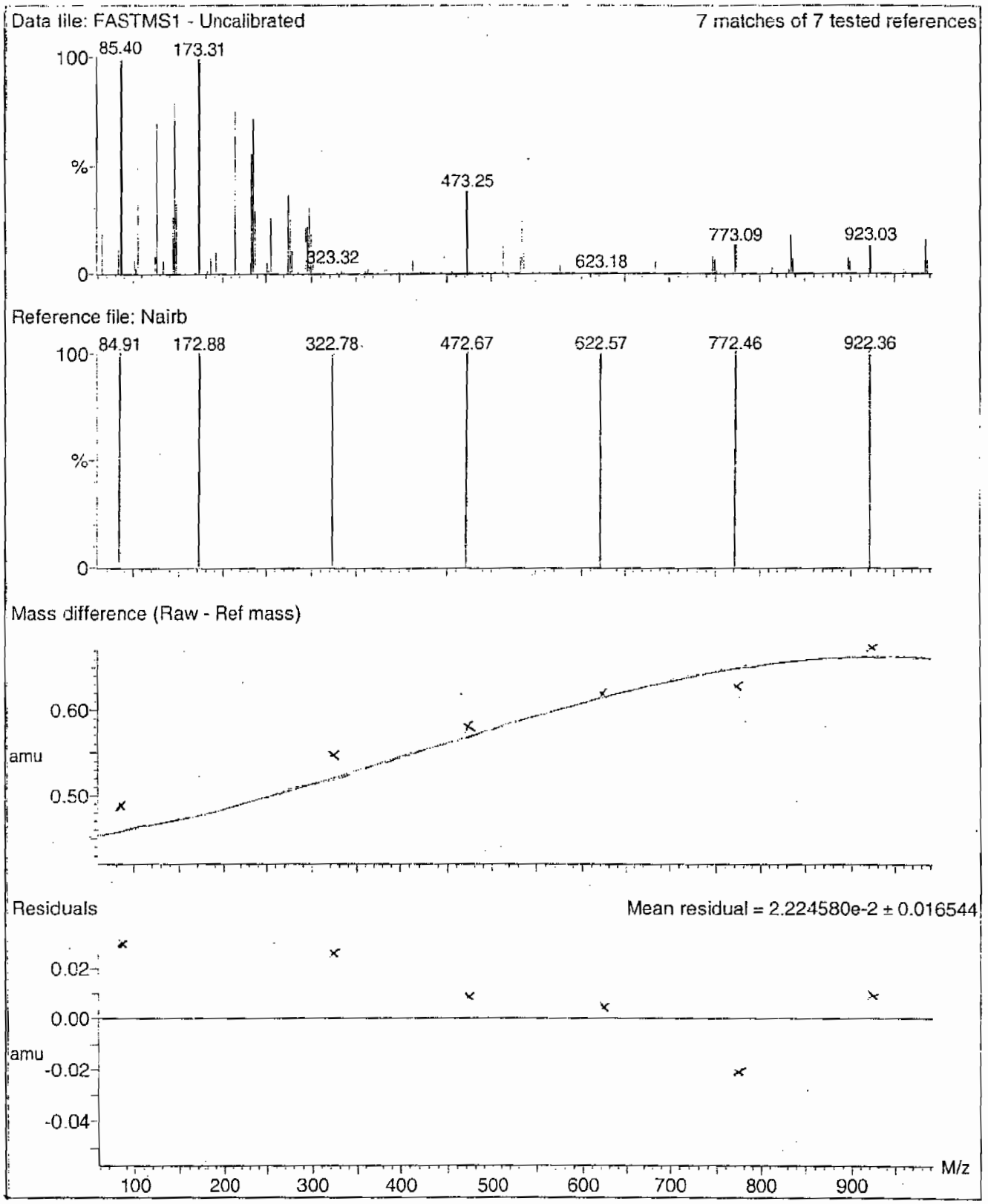
Printed: Tue Jan 08 12:20:09 2008



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS1 Scan Speed Compensation

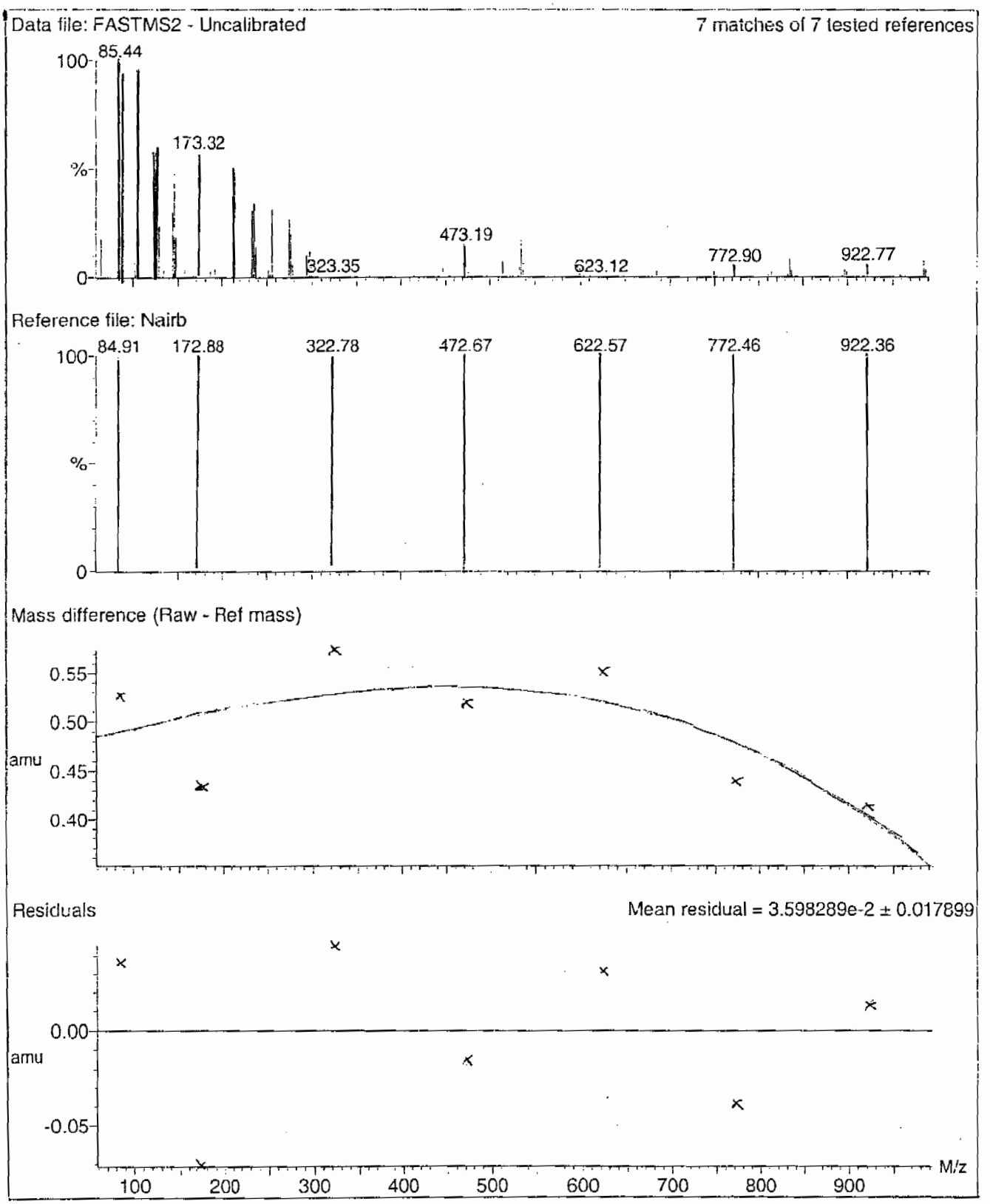
Printed: Tue Jan 08 12:21:04 2008



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scan Speed Compensation

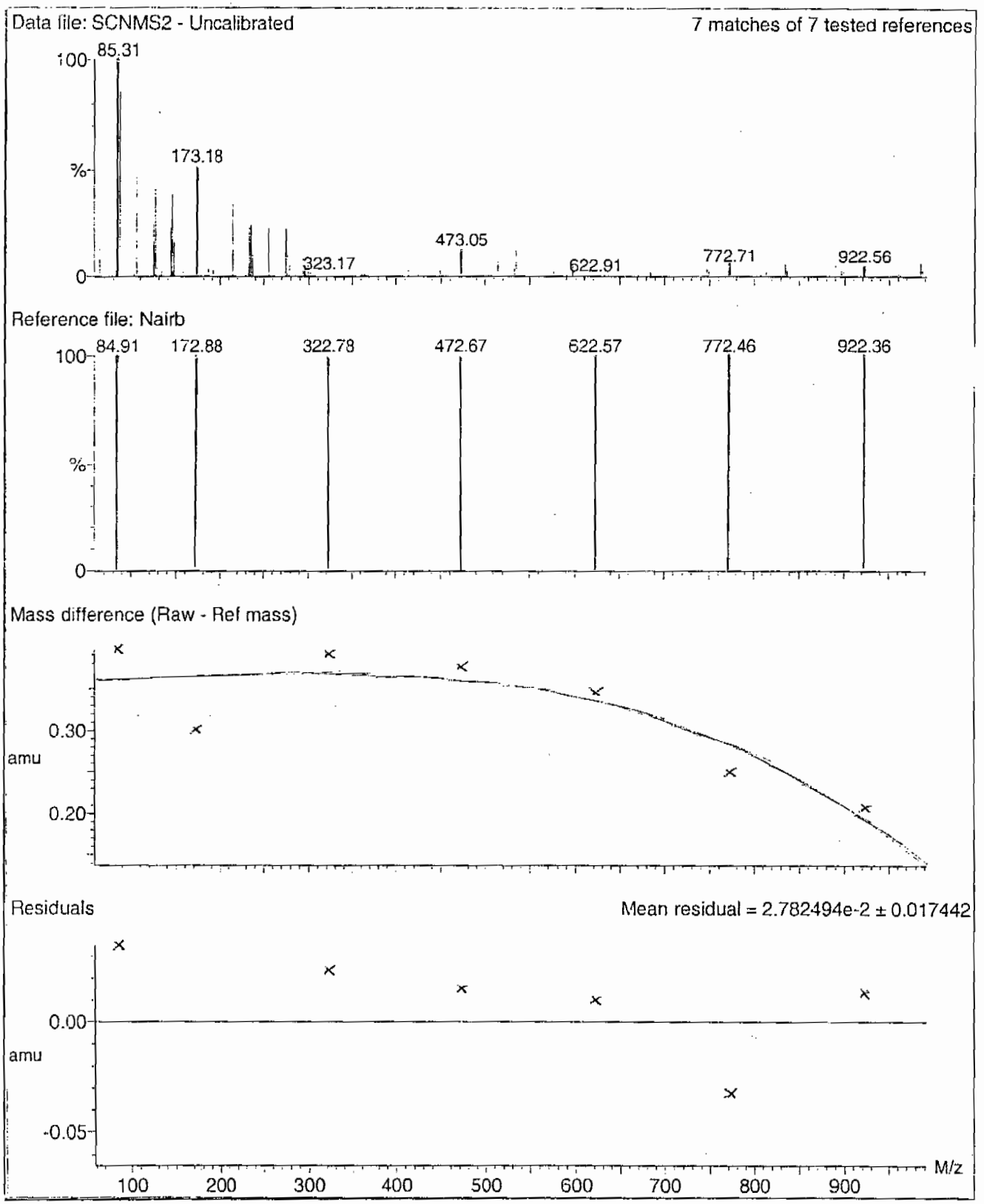
Printed: Tue Jan 08 12:23:51 2008



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scanning

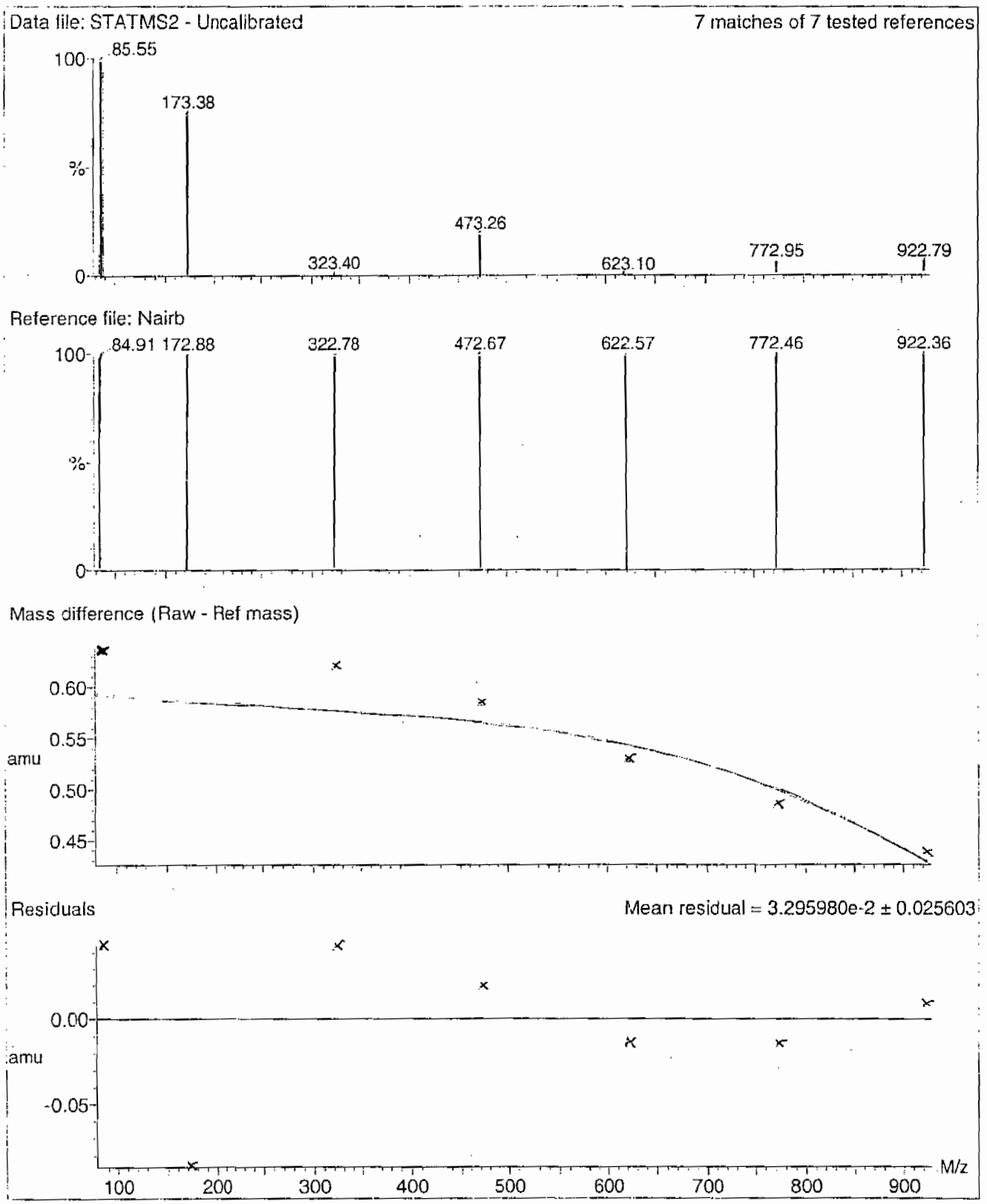
Printed: Tue Jan 08 12:22:56 2008



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Static

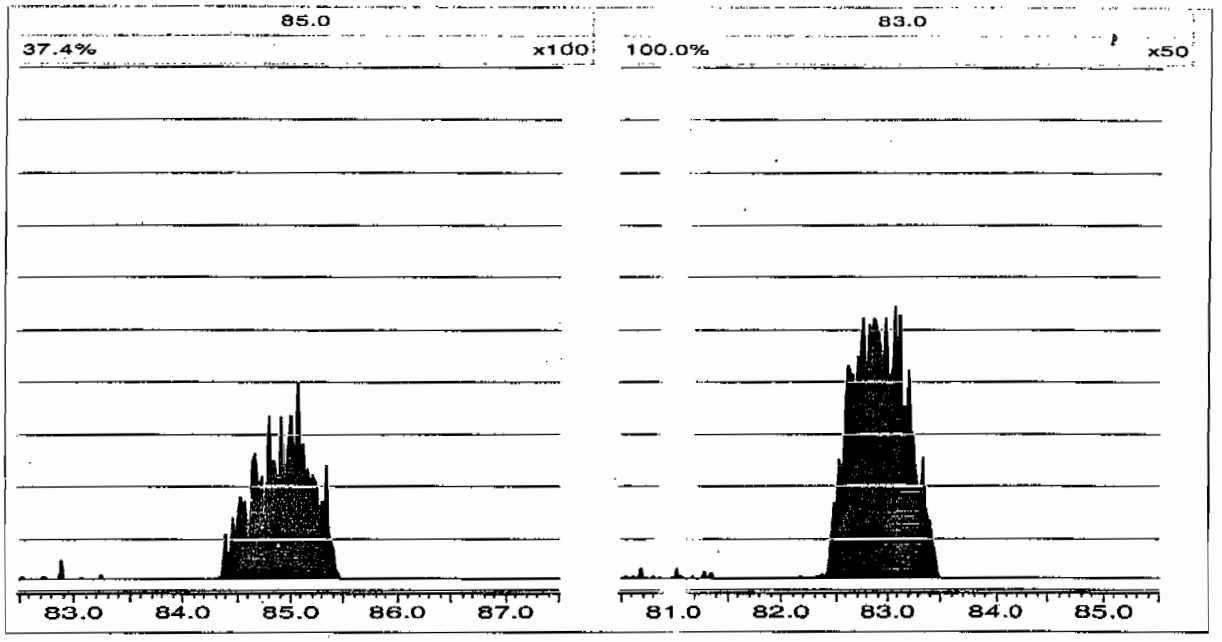
Printed: Tue Jan 08 12:21:59 2008



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

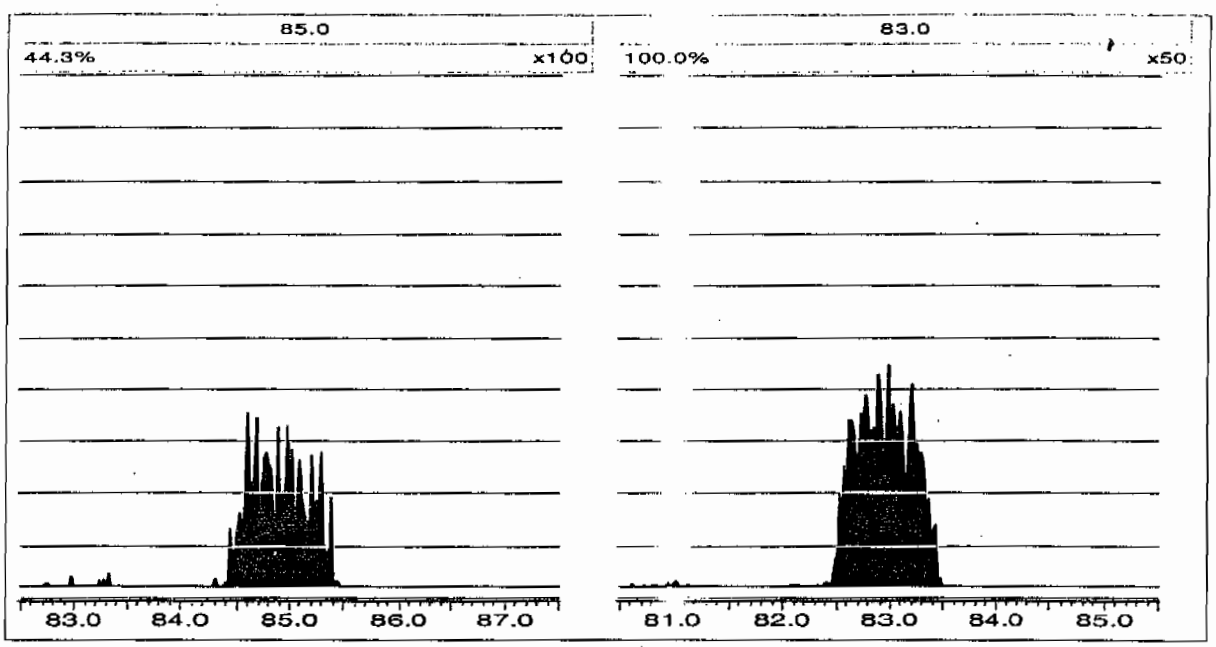
Printed: Friday, January 15, 2010 13:21:37 Eastern Standard Time



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Monday, January 18, 2010 15:47:32 Eastern Standard Time



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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1161-1

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per0115006a**	**15-JAN-10**	**24342.3**				
Lower Area Limit			**12171.15**				
Upper Area Limit			**48684.6**				
244227001	per0115068a	16-JAN-10 03:34	21716.5	3.83	3.86795	1.01	
1202011834	per0115069a	16-JAN-10 03:44	22884.2	3.83	3.85545	1.007	
1202011835	per0115070a	16-JAN-10 03:53	22296.3	3.83	3.85547	1.007	
244227002	per0115071a	16-JAN-10 04:03	22193.5	3.83	3.85552	1.007	
244227003	per0115072a	16-JAN-10 04:13	22549	3.82	3.84312	1.006	
244227004	per0115073a	16-JAN-10 04:22	24812.8	3.83	3.85545	1.007	
244227005	per0115074a	16-JAN-10 04:32	23774.9	3.83	3.85547	1.007	
244227006	per0115075a	16-JAN-10 04:41	23005.8	3.82	3.83067	1.003	

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1161-1

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per0115006a**	**15-JAN-10**	**24342.3**				
Lower Area Limit			**12171.15**				
Upper Area Limit			**48684.6**				
244227007	per0115079a	16-JAN-10 05:20	23044.7	3.82	3.86793	1.013	
244227008	per0115080a	16-JAN-10 05:29	23813	3.81	3.83063	1.005	
244227009	per0115081a	16-JAN-10 05:39	22868	3.79	3.80585	1.004	
244227010	per0115082a	16-JAN-10 05:48	24973.2	3.81	3.81822	1.002	
244227011	per0115083a	16-JAN-10 05:58	21726.8	3.81	3.8431	1.009	
244227012	per0115084a	16-JAN-10 06:07	22761.2	3.81	3.81817	1.002	
244227013	per0115085a	16-JAN-10 06:17	24548.4	3.81	3.81813	1.002	
244227014	per0115086a	16-JAN-10 06:26	23038.6	3.79	3.80582	1.004	

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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1161–1

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per0115006a**	**15–JAN–10**	**24342.3**				
Lower Area Limit			**12171.15**				
Upper Area Limit			**48684.6**				
244227015	per0115087a	16–JAN–10 06:36	22851.7	3.79	3.81823	1.007	

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98–1.02
MidLevel Standard Area	**per0118006a**	**18–JAN–10**	**25236.1**				
Lower Area Limit			**12618.05**				
Upper Area Limit			**50472.2**				
1202011832	per0118028a	18–JAN–10 21:06	24330.3	3.43	3.42068	.997	
1202011833	per0118029a	18–JAN–10 21:15	24027.3	3.43	3.44548	1.005	

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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1161-1

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per0118006a**	**18-JAN-10**	**25236.1**				
Lower Area Limit			**12618.05**				
Upper Area Limit			**50472.2**				
1202011836	per0118030a	18-JAN-10 21:24	24589.7	3.53	3.54497	1.004	

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SAMPLE
DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7734

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227001

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.5

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.535	2.14	0.535	ug/kg	U	1	16-JAN-10 03:34	per0115068a
	Perchlorate Isotope Ratio						1	16-JAN-10 03:34	per0115068a
14797-73-0	Perchlorate-101	.535	2.14	0.535	ug/kg	U	1	16-JAN-10 03:34	per0115068a
	Perchlorate-O(18)			4.82	ug/kg		1	16-JAN-10 03:34	per0115068a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

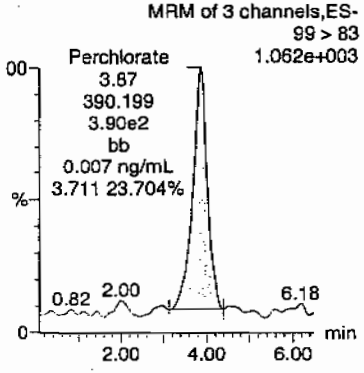
ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115068a
ate: 16-Jan-2010
lme: 03:34:55
): 244227001
ial: 2:2,C

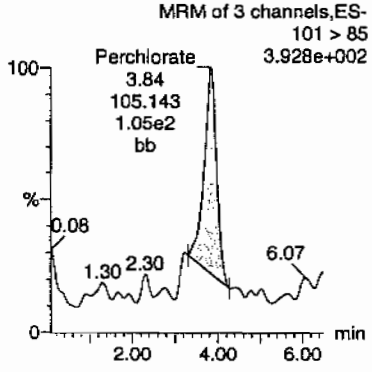
|LAWL|940145|SOL20|1|

AWW 01-18-10

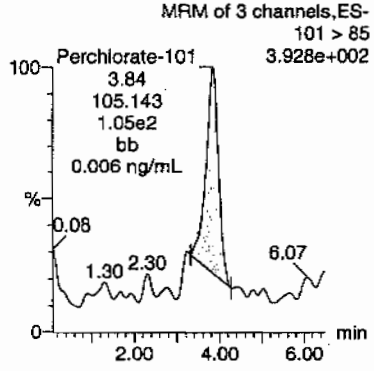
erchlorate



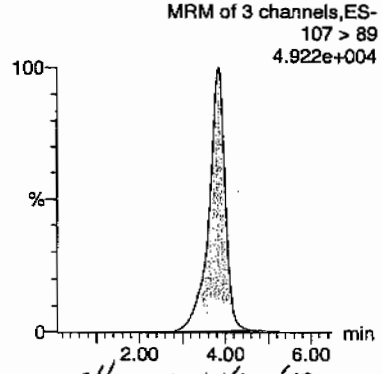
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMK 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227001	Perchlorate	99 > 83	3.87	390.199	390.199	bb			0.0069			65.109	3.71
44227001	Perchlorate-101	101 > 85	3.84	105.143	105.143	bb			0.0058			70.198	
44227001	Perchlorate-O(18)	107 > 89	3.83	21716.463	21716.463	bb			0.4503	90.06	-9.94	2418.5...	

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7701

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227002

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.672	2.69	0.672	ug/kg	U	1	16-JAN-10 04:03	per0115071a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:03	per0115071a
14797-73-0	Perchlorate-101	.672	2.69	0.672	ug/kg	U	1	16-JAN-10 04:03	per0115071a
	Perchlorate-O(18)			6.19	ug/kg		1	16-JAN-10 04:03	per0115071a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

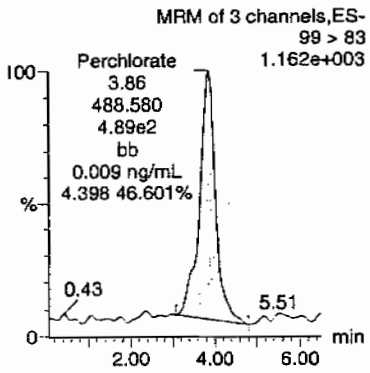
Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Name: per0115071a
Date: 16-Jan-2010
Time: 04:03:30
ID: 244227002
Vial: 2:2,F

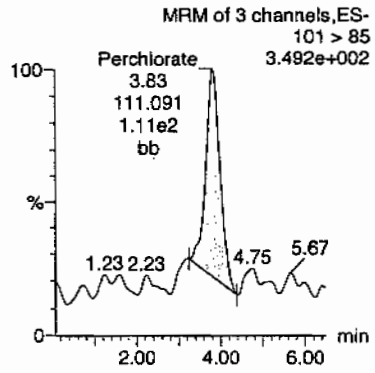
LANL | 940145 | 50620 | 1 |

01-18-10

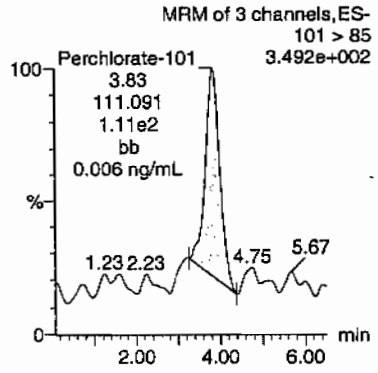
Perchlorate



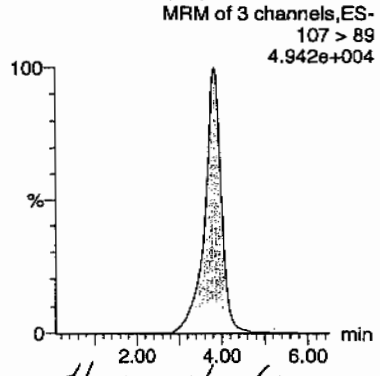
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244227002	Perchlorate	99 > 83	3.86	488.580	488.580	bb			0.0087			64.335	4.40
244227002	Perchlorate-101	101 > 85	3.83	111.091	111.091	bb			0.0061			40.001	
244227002	Perchlorate-O(18)	107 > 89	3.83	22193.529	22193.529	bb			0.4602	92.03	-7.97	1374.9...	

okay
(0.050)

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7702

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227003

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.588	2.35	0.588	ug/kg	U	1	16-JAN-10 04:13	per0115072a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:13	per0115072a
14797-73-0	Perchlorate-101	.588	2.35	0.588	ug/kg	U	1	16-JAN-10 04:13	per0115072a
	Perchlorate-O(18)			5.50	ug/kg		1	16-JAN-10 04:13	per0115072a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

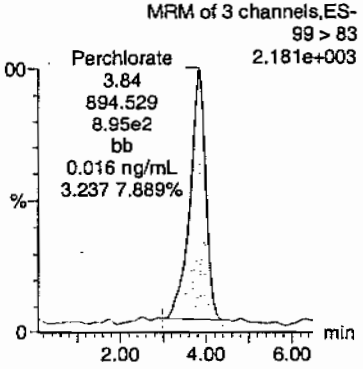
ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115072a
ate: 16-Jan-2010
ime: 04:13:01
): 244227003
ial: 2:3,A

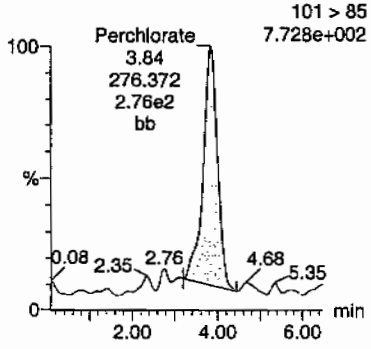
|LANL|940145|5020|1|

cmw
01-18-10

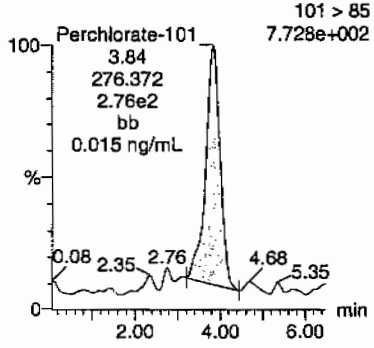
erchlorate



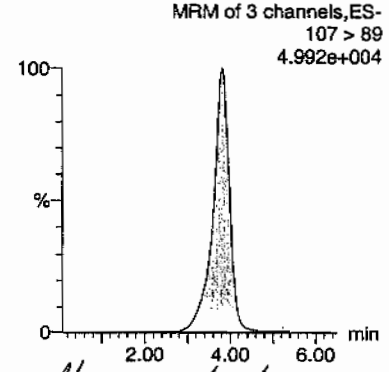
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227003	Perchlorate	99 > 83	3.84	894.529	894.529	bb			0.0159			274.429	3.24
44227003	Perchlorate-101	101 > 85	3.84	276.372	276.372	bb			0.0152			36.566	
44227003	Perchlorate-O(18)	107 > 89	3.82	22548.967	22548.967	bb			0.4675	93.51	-6.49	2413.6...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7700

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227004

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.7

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 04:22	per0115073a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:22	per0115073a
14797-73-0	Perchlorate-101	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 04:22	per0115073a
	Perchlorate-O(18)			5.49	ug/kg		1	16-JAN-10 04:22	per0115073a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

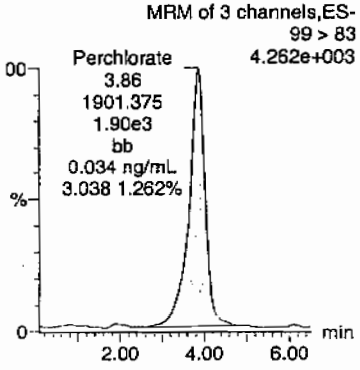
ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115073a
ate: 16-Jan-2010
ime: 04:22:34
): 244227004
ial: 2:3,B

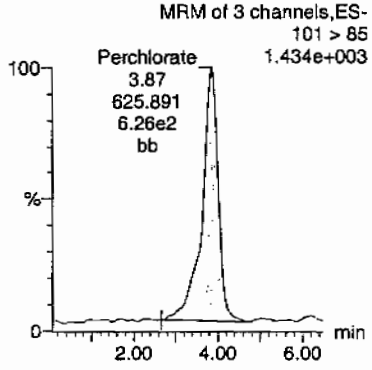
|LANL|940145|SOL20|1|

CWW 01-18-10

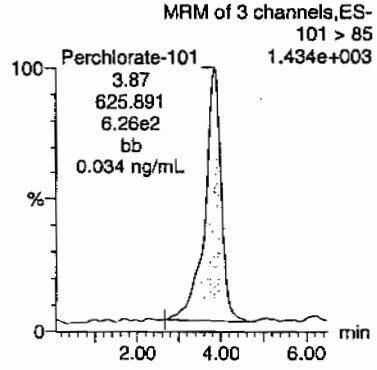
erchlorate



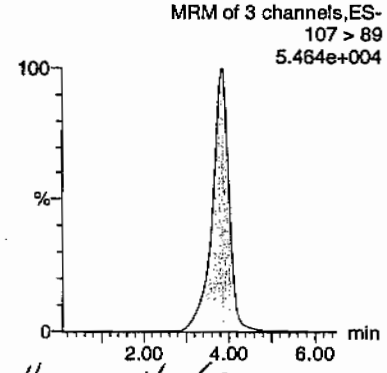
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hum 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
14227004	Perchlorate	99 > 83	3.86	1901.375	1901.375	bb			0.0338			151.165	3.04
14227004	Perchlorate-101	101 > 85	3.87	625.891	625.891	bb			0.0344			41.426	
14227004	Perchlorate-O(18)	107 > 89	3.83	24812.850	24812.850	bb			0.5145	102.90	2.90	4550.8...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7699

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227005

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 80

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.628	2.51	0.710	ug/kg	J	1	16-JAN-10 04:32	per0115074a
	Perchlorate Isotope Ratio			3.42			1	16-JAN-10 04:32	per0115074a
14797-73-0	Perchlorate-101	.628	2.51	0.641	ug/kg	J	1	16-JAN-10 04:32	per0115074a
	Perchlorate-O(18)			6.20	ug/kg		1	16-JAN-10 04:32	per0115074a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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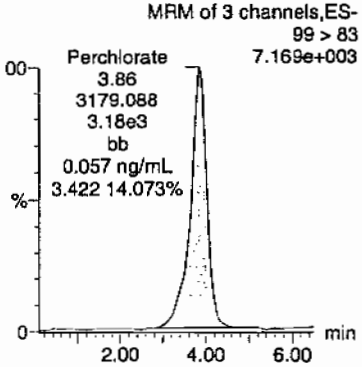
ate: 16-Jan-2010
ime: 04:32:07
): 244227005
ial: 2:3,C

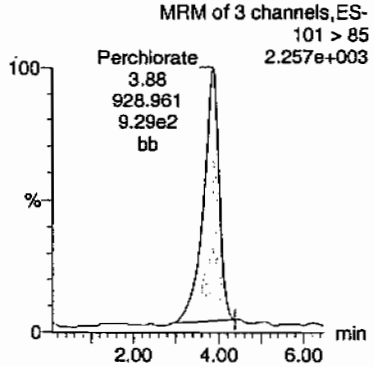
|LANL|940145|SOL20|1|

CWW 01-18-10

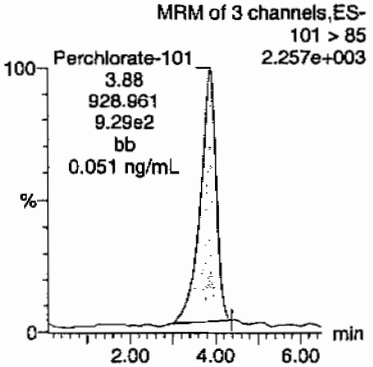
erchlorate



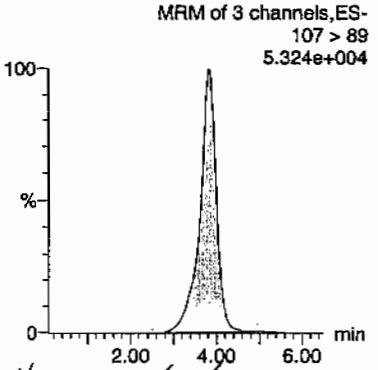
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227005	Perchlorate	99 > 83	3.86	3179.088	3179.088	bb			0.0565			414.371	3.42
44227005	Perchlorate-101	101 > 85	3.88	928.961	928.961	bb			0.0510			101.392	
44227005	Perchlorate-O(18)	107 > 89	3.83	23774.898	23774.898	bb			0.4930	98.59	-1.41	2512.3...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7727

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227006

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 75

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.669	2.68	0.669	ug/kg	U	1	16-JAN-10 04:41	per0115075a
	Perchlorate Isotope Ratio						1	16-JAN-10 04:41	per0115075a
14797-73-0	Perchlorate-101	.669	2.68	0.669	ug/kg	U	1	16-JAN-10 04:41	per0115075a
	Perchlorate-O(18)			6.38	ug/kg		1	16-JAN-10 04:41	per0115075a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115075a
ate: 16-Jan-2010
ime: 04:41:40
): 244227006
ial: 2:3,D

|LANL| 940145 | 50120 | 1 |

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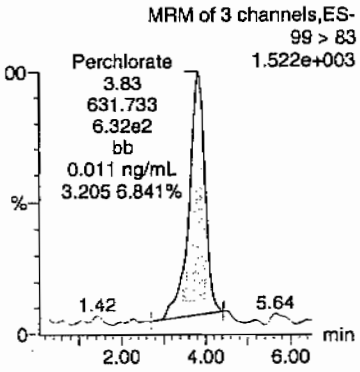
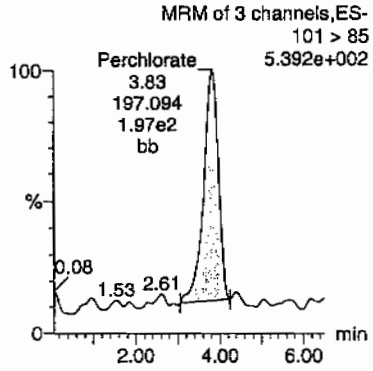
01-18-10

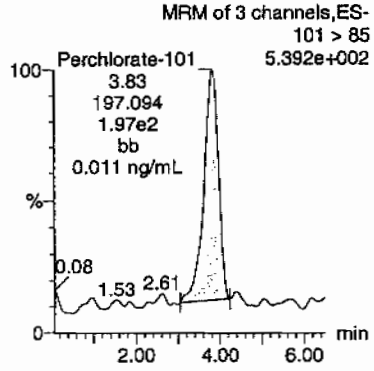
erchlorate



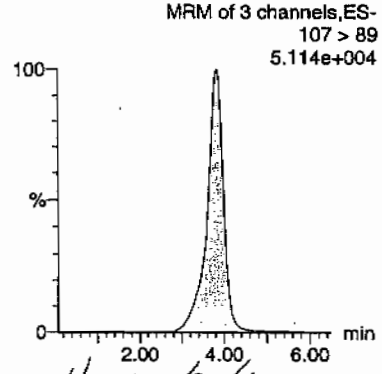
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hnm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227006	Perchlorate	99 > 83	3.83	631.733	631.733	bb			0.0112			62.268	3.21
44227006	Perchlorate-101	101 > 85	3.83	197.094	197.094	bb			0.0108			38.347	
44227006	Perchlorate-O(18)	107 > 89	3.82	23005.760	23005.760	bb			0.4770	95.40	-4.60	671.856	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7710

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227007

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.6

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 05:20	per0115079a
	Perchlorate Isotope Ratio						1	16-JAN-10 05:20	per0115079a
14797-73-0	Perchlorate-101	.534	2.14	0.534	ug/kg	U	1	16-JAN-10 05:20	per0115079a
	Perchlorate-O(18)			5.10	ug/kg		1	16-JAN-10 05:20	per0115079a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

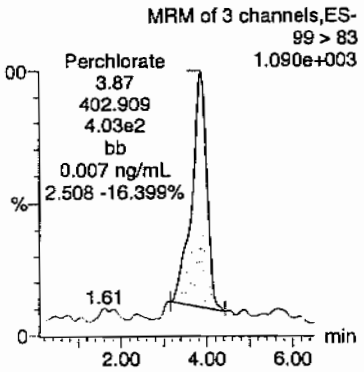
ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115079a
ate: 16-Jan-2010
ime: 05:20:02
): 244227007
ial: 2:3,E

|LANL|94045|SOL20|1|

CW 01-18-10

erchlorate



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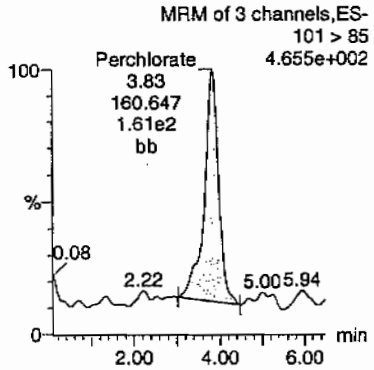

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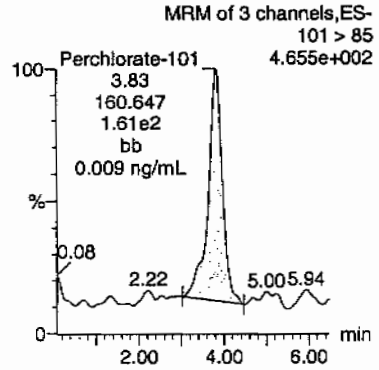
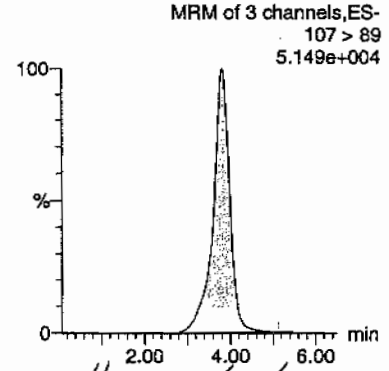


Perchlorate-O(18)



HMM 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227007	Perchlorate	99 > 83	3.87	402.909	402.909	bb			0.0072			84.878	2.51
44227007	Perchlorate-101	101 > 85	3.83	160.647	160.647	bb			0.0088			59.570	
44227007	Perchlorate-O(18)	107 > 89	3.82	23044.705	23044.705	bb			0.4778	95.56	-4.44	1744.4...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7715

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227008

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	2.09	ug/kg	J	1	16-JAN-10 05:29	per0115080a
	Perchlorate Isotope Ratio			3.06			1	16-JAN-10 05:29	per0115080a
14797-73-0	Perchlorate-101	.675	2.7	2.12	ug/kg	J	1	16-JAN-10 05:29	per0115080a
	Perchlorate-O(18)			6.67	ug/kg		1	16-JAN-10 05:29	per0115080a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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ate: 16-Jan-2010
ime: 05:29:45
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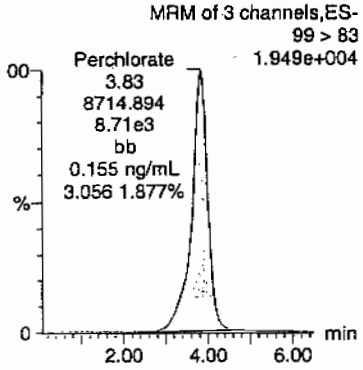
ial: 2:3,F

|LANL|940145|SOL20|11

01-18-10

erchlorate



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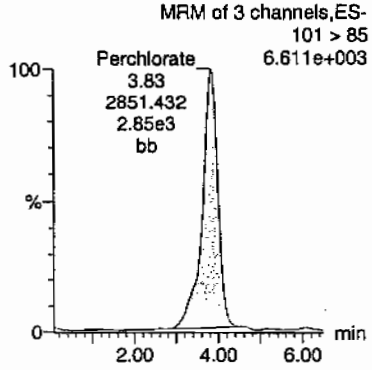

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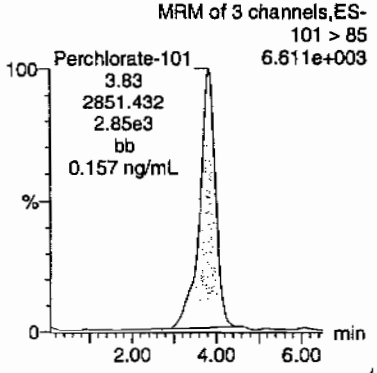
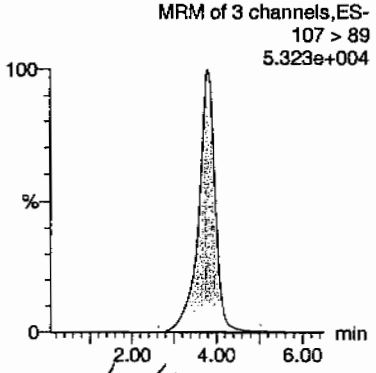


Perchlorate-O(18)



Hume 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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44227008	Perchlorate-101	101 > 85	3.83	2851.432	2851.432	bb			0.1566			716.557	
44227008	Perchlorate-O(18)	107 > 89	3.81	23813.045	23813.045	bb			0.4938	98.75	-1.25	1369.8...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7707

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227009

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 79

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.636	2.54	0.636	ug/kg	U	1	16-JAN-10 05:39	per0115081a
	Perchlorate Isotope Ratio						1	16-JAN-10 05:39	per0115081a
14797-73-0	Perchlorate-101	.636	2.54	0.636	ug/kg	U	1	16-JAN-10 05:39	per0115081a
	Perchlorate-O(18)			6.03	ug/kg		1	16-JAN-10 05:39	per0115081a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

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rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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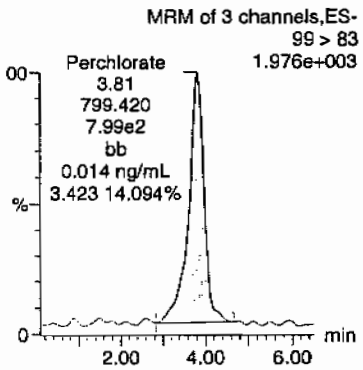
): 244227009
ial: 2:4,A

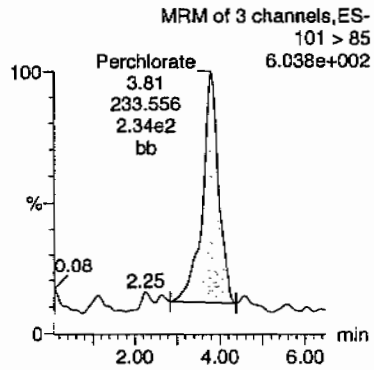
|LANL|94014s|SOL20|1|

01-12-10

erchlorate



Perchlorate



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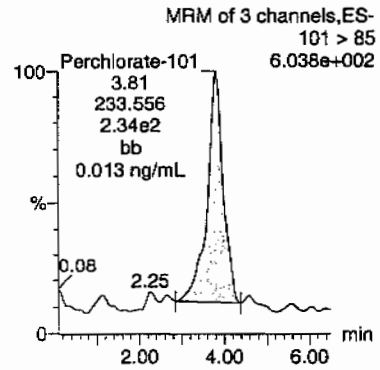
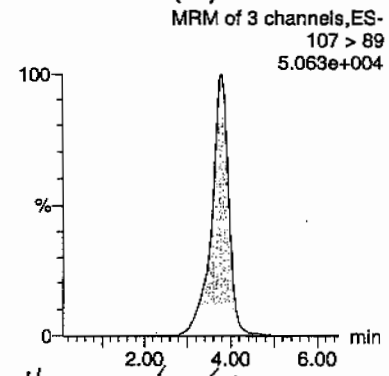


Perchlorate-O(18)



Hmm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227009	Perchlorate	99 > 83	3.81	799.420	799.420	bb			0.0142			195.461	3.42
44227009	Perchlorate-101	101 > 85	3.81	233.556	233.556	bb			0.0128			26.737	
44227009	Perchlorate-O(18)	107 > 89	3.79	22868.012	22868.012	bb			0.4742	94.83	-5.17	211.778	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7719

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227010

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.6	2.4	0.621	ug/kg	J	1	16-JAN-10 05:48	per0115082a
	Perchlorate Isotope Ratio			2.85			1	16-JAN-10 05:48	per0115082a
14797-73-0	Perchlorate-101	.6	2.4	0.674	ug/kg	J	1	16-JAN-10 05:48	per0115082a
	Perchlorate-O(18)			6.21	ug/kg		1	16-JAN-10 05:48	per0115082a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

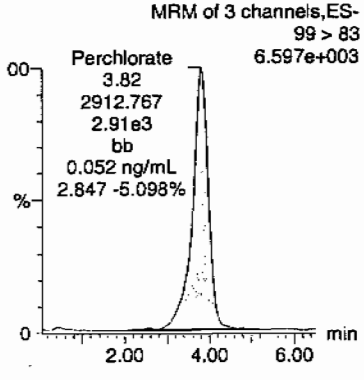
ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115082a
ate: 16-Jan-2010
ime: 05:48:50
): 244227010
ial: 2:4,B

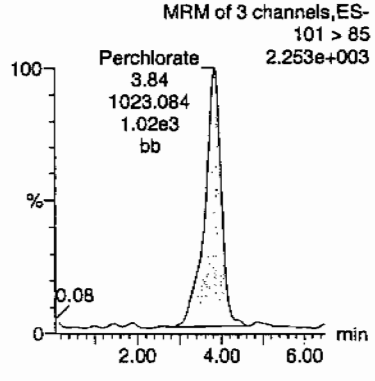
|LANL|940145|SOL20|1|

CWW
01-18-10

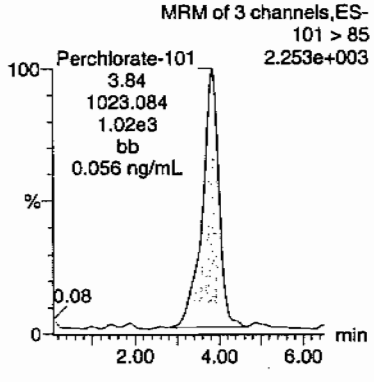
erchlorate



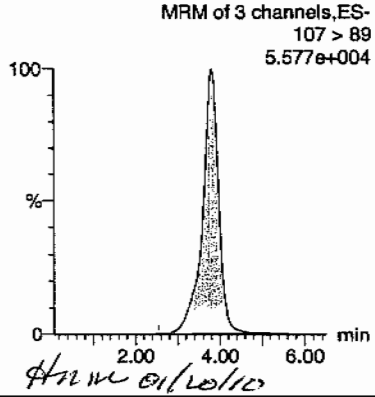
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227010	Perchlorate	99 > 83	3.82	2912.767	2912.767	bb			0.0518			292.999	2.85
44227010	Perchlorate-101	101 > 85	3.84	1023.084	1023.084	bb			0.0562			45.294	
44227010	Perchlorate-O(18)	107 > 89	3.81	24973.188	24973.188	bb			0.5178	103.56	3.56	3028.2...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7717

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227011

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.612	2.45	0.612	ug/kg	U	1	16-JAN-10 05:58	per0115083a
	Perchlorate Isotope Ratio						1	16-JAN-10 05:58	per0115083a
14797-73-0	Perchlorate-101	.612	2.45	0.612	ug/kg	U	1	16-JAN-10 05:58	per0115083a
	Perchlorate-O(18)			5.51	ug/kg		1	16-JAN-10 05:58	per0115083a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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ime: 05:58:23
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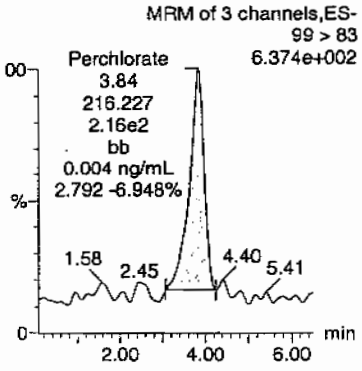
ial: 2:4,C

|LANL|94045|SOLID|1|

9-18-10

erchlorate



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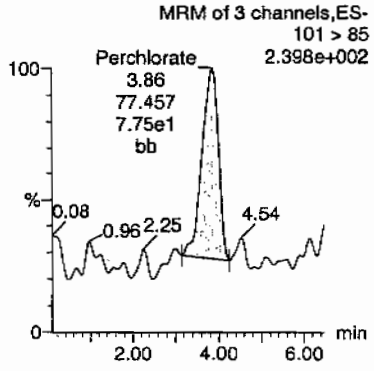

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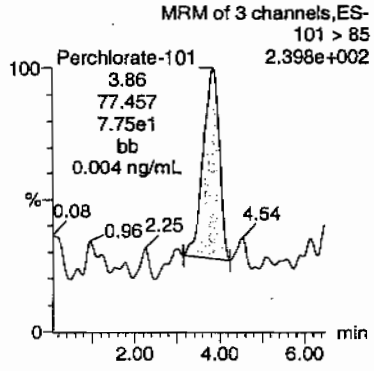
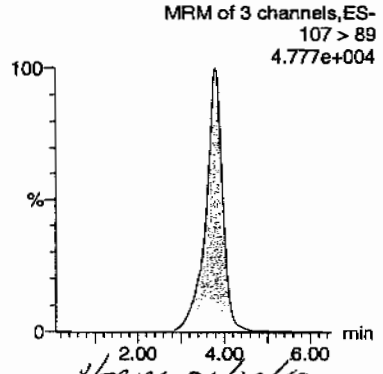


Perchlorate-O(18)



Hnm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227011	Perchlorate	99 > 83	3.84	216.227	216.227	bb			0.0038			19.414	2.79
44227011	Perchlorate-101	101 > 85	3.86	77.457	77.457	bb			0.0043			19.521	
44227011	Perchlorate-O(18)	107 > 89	3.81	21726.775	21726.775	bb			0.4505	90.10	-9.90	2345.7...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7708

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227012

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 96.8

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.517	2.07	0.517	ug/kg	U	1	16-JAN-10 06:07	per0115084a
	Perchlorate Isotope Ratio						1	16-JAN-10 06:07	per0115084a
14797-73-0	Perchlorate-101	.517	2.07	0.517	ug/kg	U	1	16-JAN-10 06:07	per0115084a
	Perchlorate-O(18)			4.88	ug/kg		1	16-JAN-10 06:07	per0115084a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

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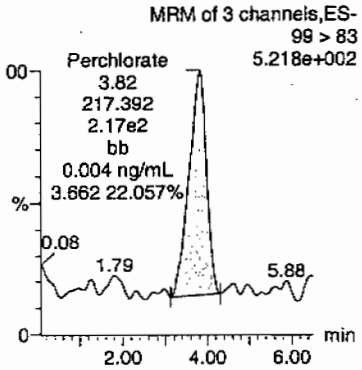
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115084a
ate: 16-Jan-2010
ime: 06:07:55
): 244227012
ial: 2:4,D

|LANL | 94045 | 5023 | 1|

01-18-10

erchlorate



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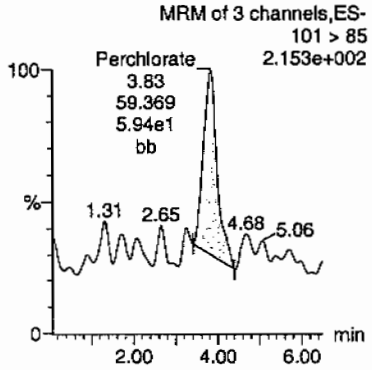
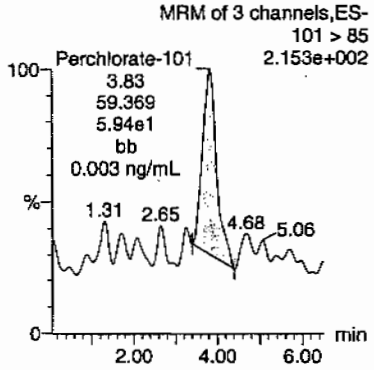
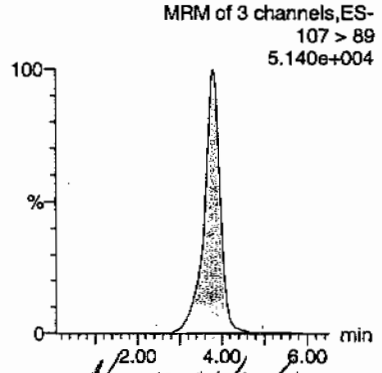


Perchlorate-101



Perchlorate-O(18)



Hum 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227012	Perchlorate	99 > 83	3.82	217.392	217.392	bb			0.0039			25.417	3.66
44227012	Perchlorate-101	101 > 85	3.83	59.369	59.369	bb			0.0033			6.790	
44227012	Perchlorate-O(18)	107 > 89	3.81	22761.158	22761.158	bb			0.4719	94.39	-5.61	3477.9...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7706

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227013

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.557	2.23	0.557	ug/kg	U	1	16-JAN-10 06:17	per0115085a
	Perchlorate Isotope Ratio						1	16-JAN-10 06:17	per0115085a
14797-73-0	Perchlorate-101	.557	2.23	0.557	ug/kg	U	1	16-JAN-10 06:17	per0115085a
	Perchlorate-O(18)			5.67	ug/kg		1	16-JAN-10 06:17	per0115085a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115085a
ate: 16-Jan-2010
ime: 06:17:27
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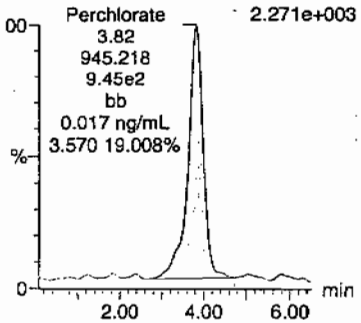
ial: 2:4,E

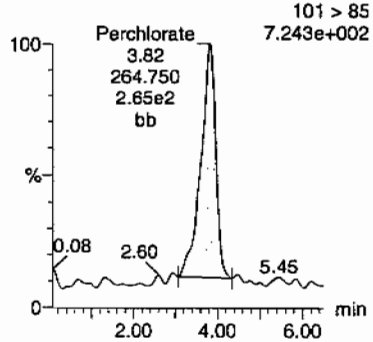
|LANL|940145|50120|11|

0148-10

erchlorate



Perchlorate



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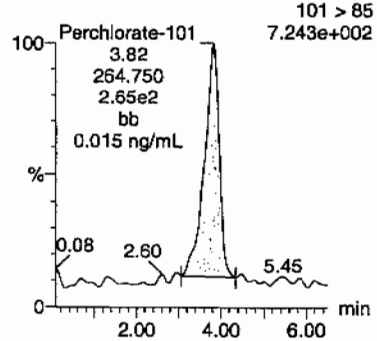
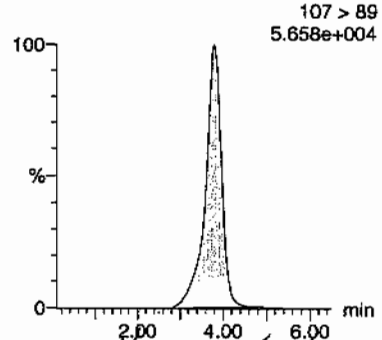


Perchlorate-O(18)



AMW 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227013	Perchlorate	99 > 83	3.82	945.218	945.218	bb			0.0168			252.737	3.57
44227013	Perchlorate-101	101 > 85	3.82	264.750	264.750	bb			0.0145			81.087	
44227013	Perchlorate-O(18)	107 > 89	3.81	24548.432	24548.432	bb			0.5090	101.80	1.80	2577.4...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7714

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227014

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 90.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.612	ug/kg	J	1	16-JAN-10 06:26	per0115086a
	Perchlorate Isotope Ratio			3.14			1	16-JAN-10 06:26	per0115086a
14797-73-0	Perchlorate-101	.553	2.21	0.601	ug/kg	J	1	16-JAN-10 06:26	per0115086a
	Perchlorate-O(18)			5.29	ug/kg		1	16-JAN-10 06:26	per0115086a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ıst Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115086a
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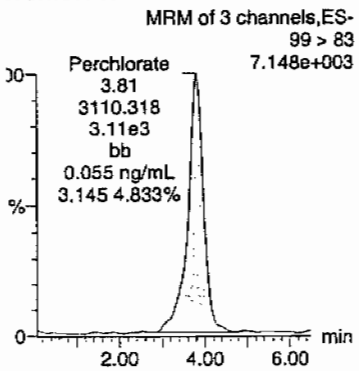
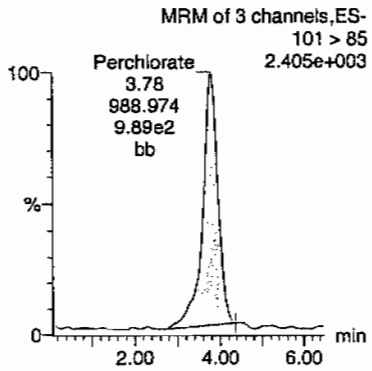
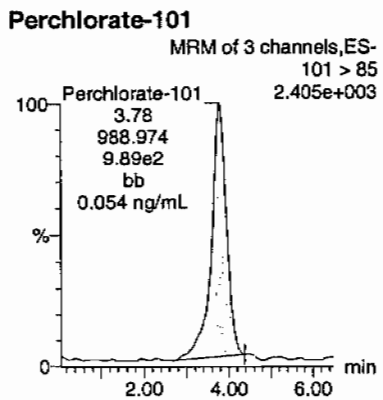
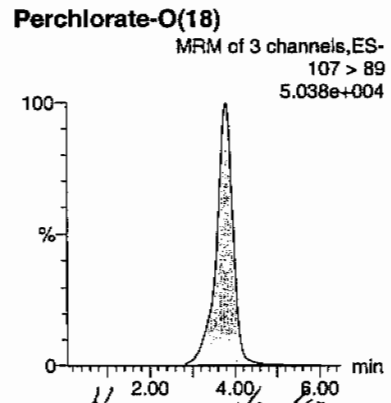
|LANL| 940145 | 50L20 |1|

CWW
01-18-10









Hmm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
14227014	Perchlorate	99 > 83	3.81	3110.318	3110.318	bb			0.0553			497.518	3.14
14227014	Perchlorate-101	101 > 85	3.78	988.974	988.974	bb			0.0543			90.765	
14227014	Perchlorate-O(18)	107 > 89	3.79	23038.572	23038.572	bb			0.4777	95.54	-4.46	2439.0...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7705

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 244227015

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.597	2.39	0.597	ug/kg	U	1	16-JAN-10 06:36	per0115087a
	Perchlorate Isotope Ratio						1	16-JAN-10 06:36	per0115087a
14797-73-0	Perchlorate-101	.597	2.39	0.597	ug/kg	U	1	16-JAN-10 06:36	per0115087a
	Perchlorate-O(18)			5.66	ug/kg		1	16-JAN-10 06:36	per0115087a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

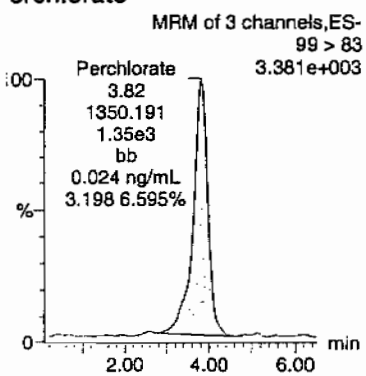
Last Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
Printed: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

Name: per0115087a
Date: 16-Jan-2010
Time: 06:36:31
ID: 244227015
Vial: 2:5,A

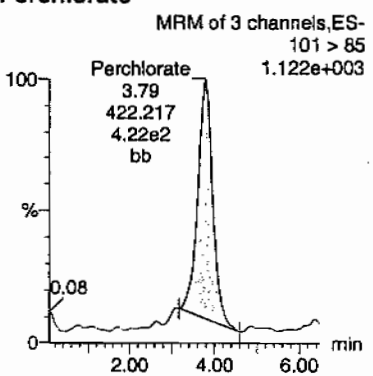
|LANL|940145|SOL20|1|

CWW 01-18-10

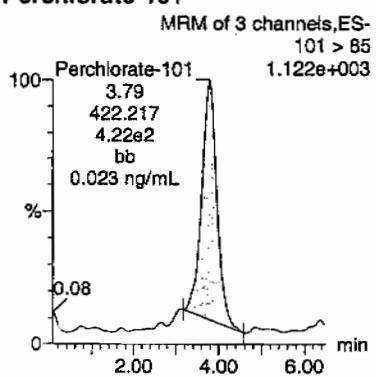
Perchlorate



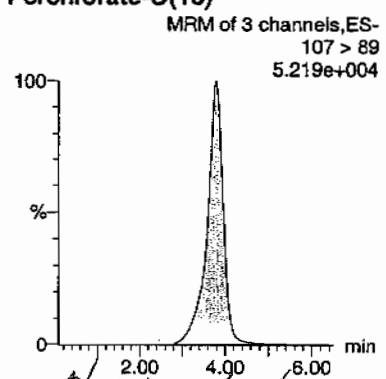
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HWW 01/20/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44227015	Perchlorate	99 > 83	3.82	1350.191	1350.191	bb			0.0240			358.263	3.20
44227015	Perchlorate-101	101 > 85	3.79	422.217	422.217	bb			0.0232			42.458	
44227015	Perchlorate-O(18)	107 > 89	3.79	22851.686	22851.686	bb			0.4738	94.76	-5.24	2783.6...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1161–1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analvzed:** 15–JAN–10

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 56254

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1161–1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analvzed:** 15–JAN–10

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate–101

Coefficient of Determination:

Calibration Curve: 18203.38

Response Type: External Standard

Curve Type: RF

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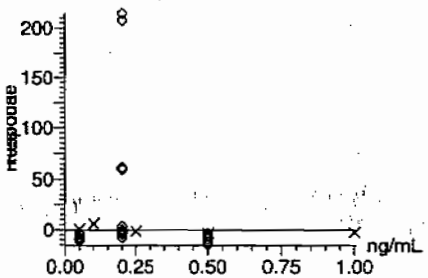
uantify Calibration Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charlers W. Wilson

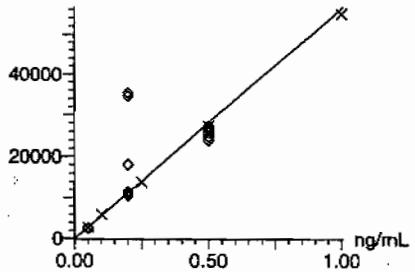
ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per011510a.mdb 18 Jan 2010 08:43:34
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011510a.cdb 18 Jan 2010 08:43:48

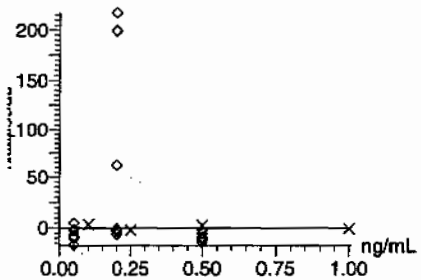
ompound name: Perchlorate
esponse Factor: 56254
RF SD: 2113.01, % Relative SD: 3.75619
esponse type: External Std, Area
urve type: RF

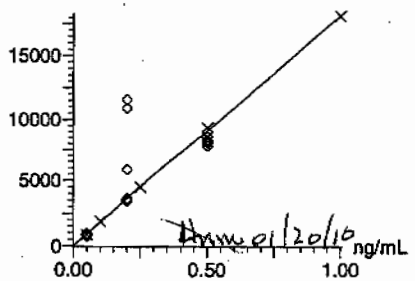




01-18-10

mpound name: Perchlorate-101
sponse Factor: 18203.4
IF SD: 580.647, % Relative SD: 3.18977
sponse type: External Std, Area
rve type: RF





01/20/10

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

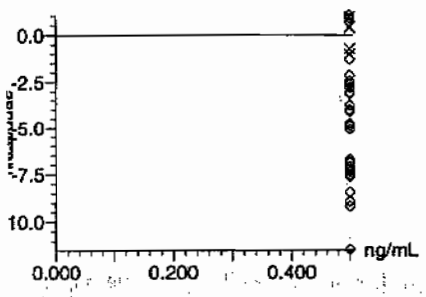
ıantify Calibration Report MassLynx 4.0 SP4

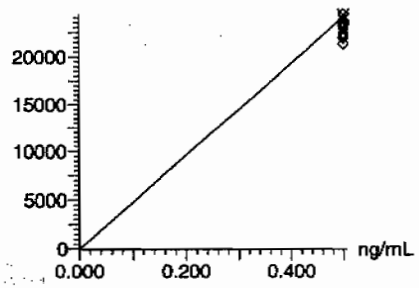
e GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
nted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ımpound name: Perchlorate-O(18)
sponse Factor: 48228.8
ıF SD: 404.995, % Relative SD: 0.839737
sponse type: External Std, Area
rve type: RF





L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1161-1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 18-JAN-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 59004.7

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1161–1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 18–JAN–10

HPLC Column: Phenomenex Ion Pac AG–16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate–101

Coefficient of Determination:

Calibration Curve: 19454.42

Response Type: External Standard

Curve Type: RF

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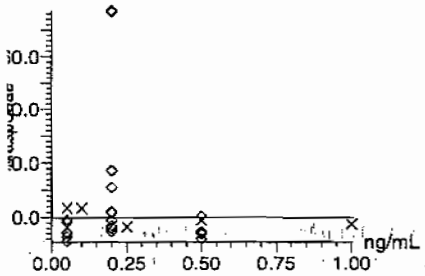
uantify Calibration Report MassLynx 4.0 SP4
ie GEL Group, LLC Analyst: Charlers W. Wilson

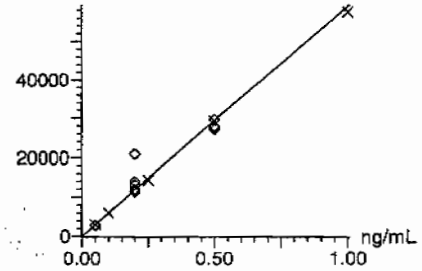
ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

st Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
inted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per011810a.mdb 19 Jan 2010 07:54:21
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011810a.cdb 19 Jan 2010 07:54:38

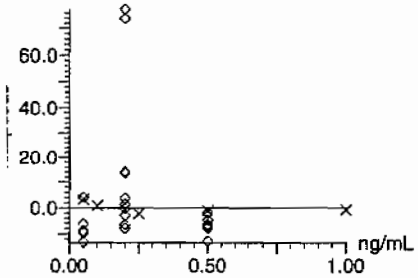
ompound name: Perchlorate
esponse Factor: 59004.7
RF SD: 1951.42, % Relative SD: 3.30723
esponse type: External Std, Area
rve type: RF

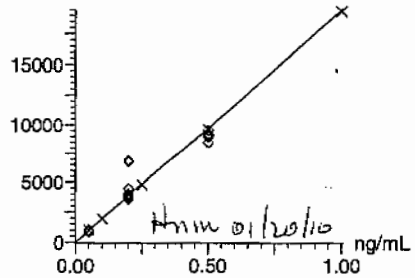




CWW
01-19-10

mpound name: Perchlorate-101
sponse Factor: 19454.4
F SD: 414.837, % Relative SD: 2.13235
sponse type: External Std, Area
rve type: RF





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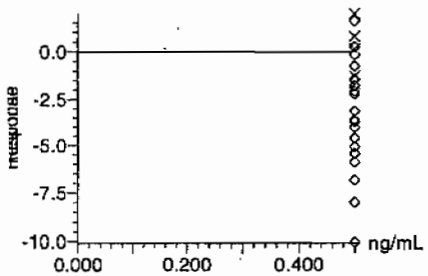
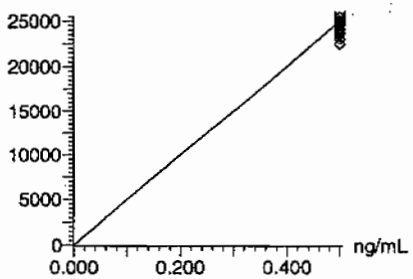
uantify Calibration Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ıst Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
inted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ɔmpound name: Perchlorate-O(18)
ɜsponse Factor: 50066.7
RF SD: 749.985, % Relative SD: 1.49797
ɜsponse type: External Std, Area
ırve type: RF





L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1161–1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	96.93	15–JAN–10 18:11	per0115009a
Perchlorate Isotope Ratio		3.03		15–JAN–10 18:11	per0115009a
Perchlorate–101	.5	.49	98.8	15–JAN–10 18:11	per0115009a
Perchlorate	.5	.5	100.43	18–JAN–10 18:23	per0118009a
Perchlorate Isotope Ratio		3.11		18–JAN–10 18:23	per0118009a
Perchlorate–101	.5	.49	98.08	18–JAN–10 18:23	per0118009a

uantify Sample Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charlers W. Wilson

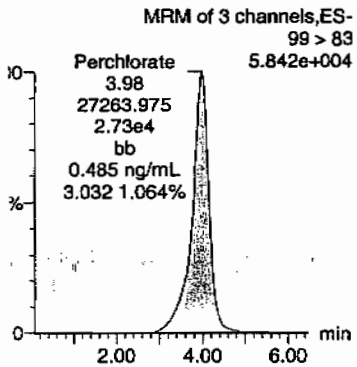
ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

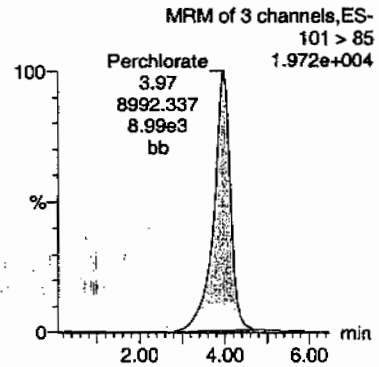
Pass
01-18-10

ame: per0115009a
ate: 15-Jan-2010
me: 18:11:06
: WCL100104-06ICV
al: 1:2,A

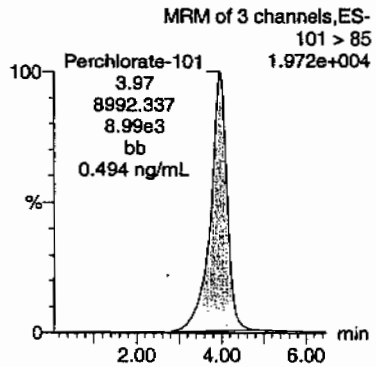
erchlorate



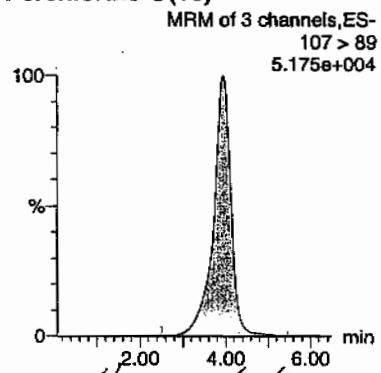
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06ICV	Perchlorate	99 > 83	3.98	27263.975	27263.975	bb			0.4847	96.93	-3.07	1669.1...	3.03
CL100104-06ICV	Perchlorate-101	101 > 85	3.97	8992.337	8992.337	bb			0.4940	98.80	-1.20	430.961	
CL100104-06ICV	Perchlorate-O(18)	107 > 89	3.95	24367.420	24367.420	bb			0.5052	101.05	1.05	2663.2...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

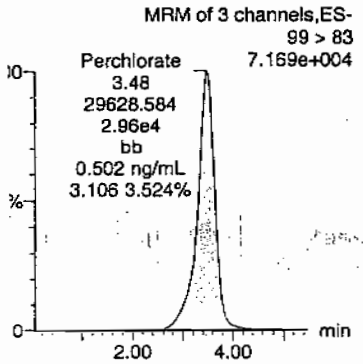
ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

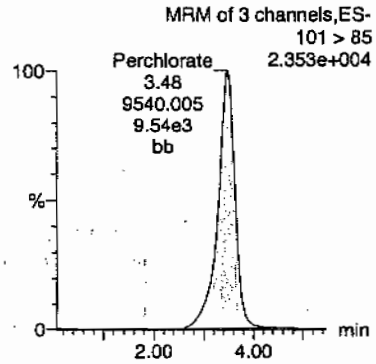
Pass
CWW
01-19-10

ame: per0118009a
ate: 18-Jan-2010
me: 18:23:55
: WCL100118-06ICV
al: 1:2,A

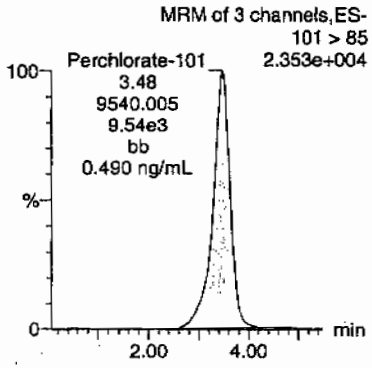
erchlorate



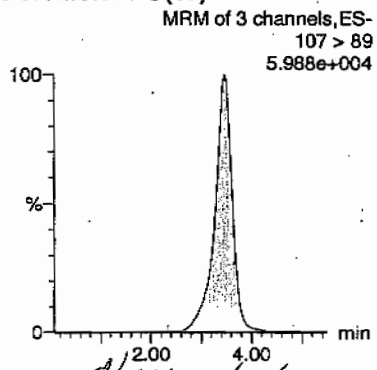
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmw 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-06ICV	Perchlorate	99 > 83	3.48	29628.584	29628.584	bb			0.5021	100.43	0.43	5754.5...	3.11
CL100118-06ICV	Perchlorate-101	101 > 85	3.48	9540.005	9540.005	bb			0.4904	98.08	-1.92	755.962	
CL100118-06ICV	Perchlorate-O(18)	107 > 89	3.47	24516.842	24516.842	bb			0.4897	97.94	-2.06	2610.1...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.47	94.91	15-JAN-10 19:17	per0115016a
Perchlorate Isotope Ratio		3.11		15-JAN-10 19:17	per0115016a
Perchlorate-101	.5	.47	94.42	15-JAN-10 19:17	per0115016a
Perchlorate	.5	.45	90.92	15-JAN-10 20:43	per0115025a
Perchlorate Isotope Ratio		3.13		15-JAN-10 20:43	per0115025a
Perchlorate-101	.5	.45	89.68	15-JAN-10 20:43	per0115025a
Perchlorate	.5	.47	93.21	15-JAN-10 22:47	per0115038a
Perchlorate Isotope Ratio		3.18		15-JAN-10 22:47	per0115038a
Perchlorate-101	.5	.45	90.5	15-JAN-10 22:47	per0115038a
Perchlorate	.5	.44	87.8	16-JAN-10 02:46	per0115063a
Perchlorate Isotope Ratio		3.07		16-JAN-10 02:46	per0115063a
Perchlorate-101	.5	.44	88.37	16-JAN-10 02:46	per0115063a
Perchlorate	.5	.47	93.12	16-JAN-10 04:51	per0115076a

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161-1

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		3.15		16-JAN-10 04:51	per0115076a
Perchlorate-101	.5	.46	91.49	16-JAN-10 04:51	per0115076a
Perchlorate	.5	.44	88.02	16-JAN-10 06:46	per0115088a
Perchlorate Isotope Ratio		3.02		16-JAN-10 06:46	per0115088a
Perchlorate-101	.5	.45	90.02	16-JAN-10 06:46	per0115088a
Perchlorate	.5	.47	93.83	18-JAN-10 20:06	per0118021a
Perchlorate Isotope Ratio		3.04		18-JAN-10 20:06	per0118021a
Perchlorate-101	.5	.47	93.61	18-JAN-10 20:06	per0118021a
Perchlorate	.5	.46	91.93	18-JAN-10 21:58	per0118034a
Perchlorate Isotope Ratio		3.2		18-JAN-10 21:58	per0118034a
Perchlorate-101	.5	.44	87.18	18-JAN-10 21:58	per0118034a

ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

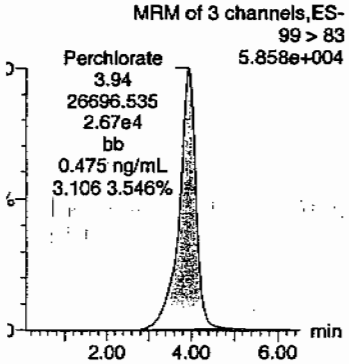
taset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
nted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

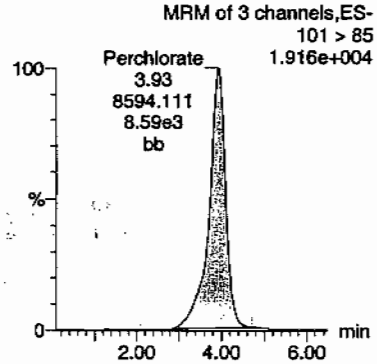
me: per0115016a
te: 15-Jan-2010
ne: 19:17:55
WCL100104-06CCV
ıl: 1:2,A

Pass
aw
01-18-10

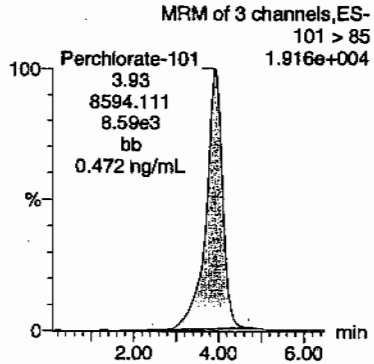
rchlorate



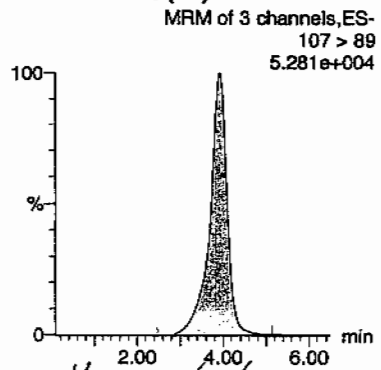
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmc 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06CCV	Perchlorate	99 > 83	3.94	26696.535	26696.535	bb			0.4746	94.91	-5.09	3449.1...	3.11
CL100104-06CCV	Perchlorate-101	101 > 85	3.93	8594.111	8594.111	bb			0.4721	94.42	-5.58	579.361	
CL100104-06CCV	Perchlorate-O(18)	107 > 89	3.92	24366.004	24366.004	bb			0.5052	101.04	1.04	6703.9...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ıst Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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Pass
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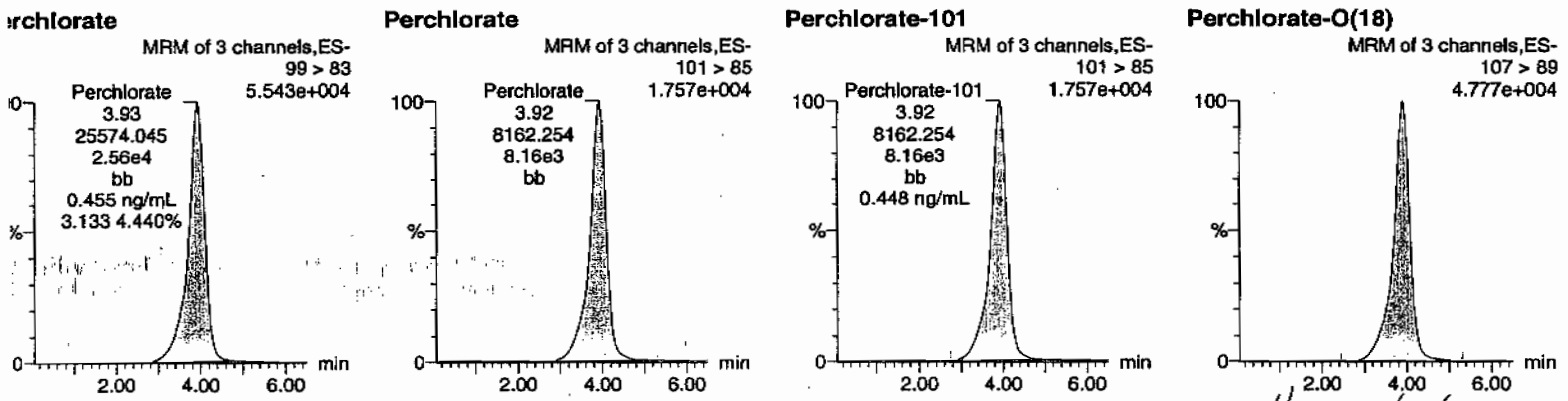
01-18-10



Hmc 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06CCV	Perchlorate	99 > 83	3.93	25574.045	25574.045	bb			0.4546	90.92	-9.08	751.918	3.13
CL100104-06CCV	Perchlorate-101	101 > 85	3.92	8162.254	8162.254	bb			0.4484	89.68	-10.32	469.738	
CL100104-06CCV	Perchlorate-O(18)	107 > 89	3.91	22330.109	22330.109	bb			0.4630	92.60	-7.40	1588.6...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

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inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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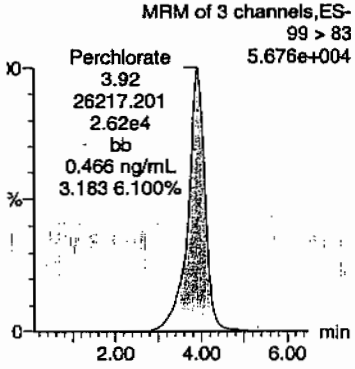
Pass
aw
01-18-10

ırchlorate



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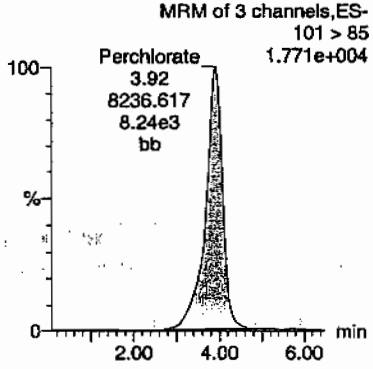
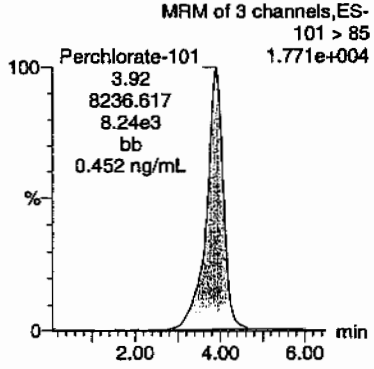
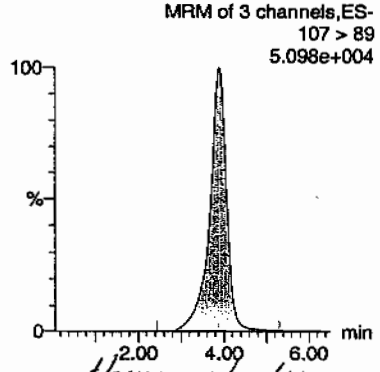


Perchlorate-101



Perchlorate-O(18)



HMW 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06CCV	Perchlorate	99 > 83	3.92	26217.201	26217.201	bb			0.4661	93.21	-6.79	2136.7...	3.18
CL100104-06CCV	Perchlorate-101	101 > 85	3.92	8236.617	8236.617	bb			0.4525	90.50	-9.50	361.472	
CL100104-06CCV	Perchlorate-O(18)	107 > 89	3.89	23116.453	23116.453	bb			0.4793	95.86	-4.14	1139.5...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

e GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

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nted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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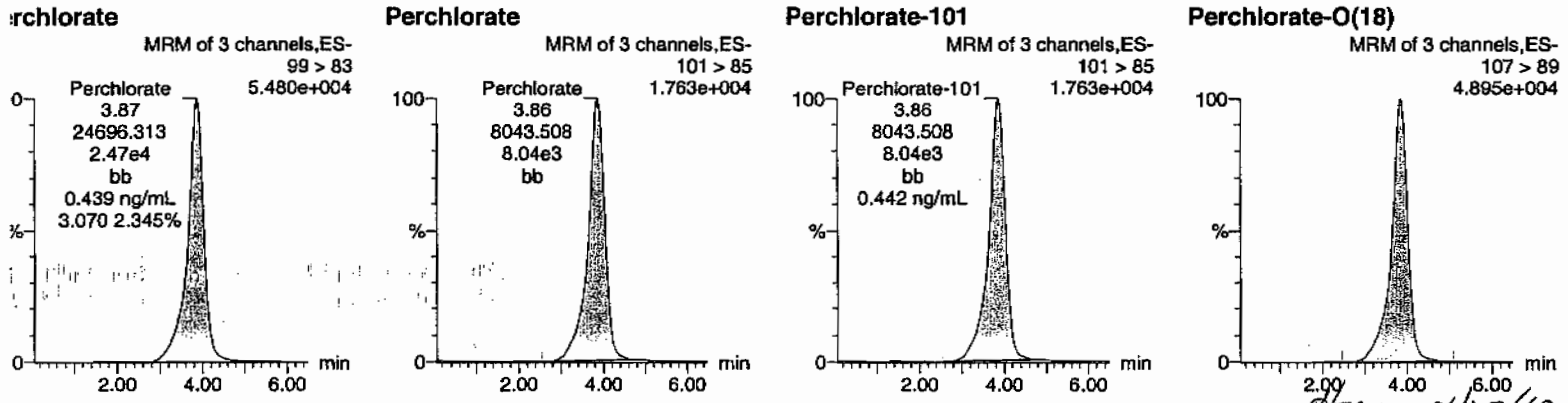
al: 1:2,A

Pass
aw
01-18-10



Anm 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06CCV	Perchlorate	99 > 83	3.87	24696.313	24696.313	bb			0.4390	87.80	-12.20	4865.5...	3.07
CL100104-06CCV	Perchlorate-101	101 > 85	3.86	8043.508	8043.508	bb			0.4419	88.37	-11.63	204.127	
CL100104-06CCV	Perchlorate-O(18)	107 > 89	3.84	21897.205	21897.205	bb			0.4540	90.81	-9.19	2986.7...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

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inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

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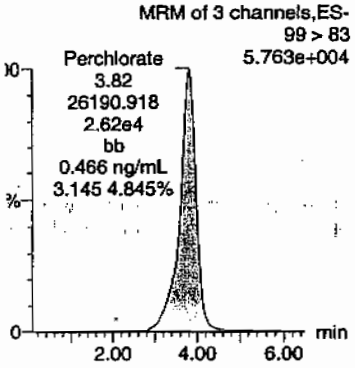
Pass
01-18-10

erchlorate



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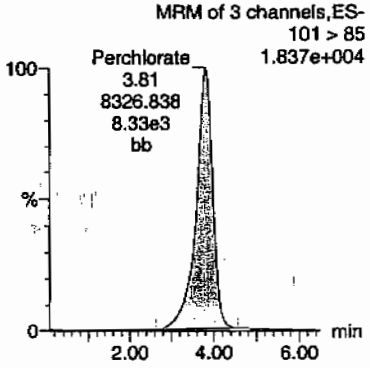
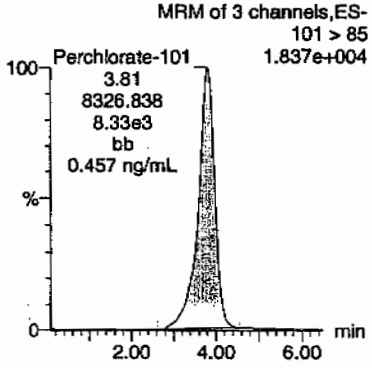
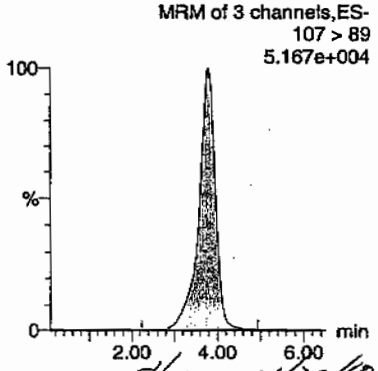


Perchlorate-101



Perchlorate-O(18)



Hmm. 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06CCV	Perchlorate	99 > 83	3.82	26190.918	26190.918	bb			0.4656	93.12	-6.88	319.568	3.15
CL100104-06CCV	Perchlorate-101	101 > 85	3.81	8326.838	8326.838	bb			0.4574	91.49	-8.51	374.344	
CL100104-06CCV	Perchlorate-O(18)	107 > 89	3.79	22933.777	22933.777	bb			0.4755	95.10	-4.90	353.366	

:L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

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ate: 16-Jan-2010
me: 06:46:05
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al: 1:2,A

Pass
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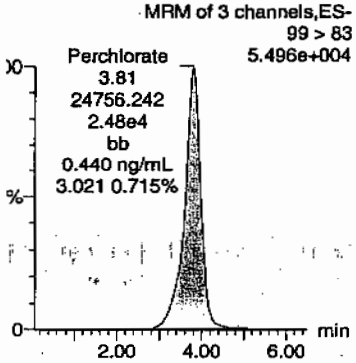
01-18-10

erchlorate



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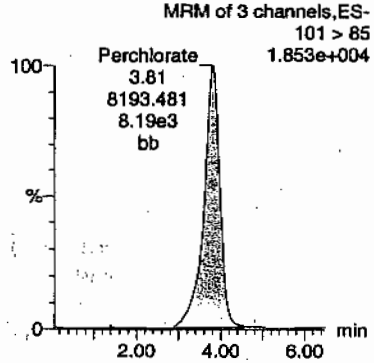
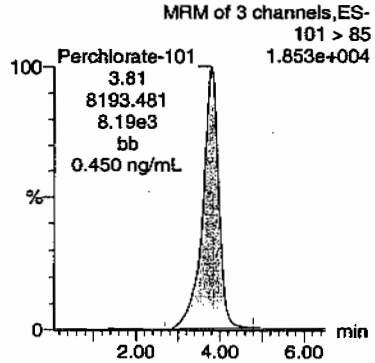
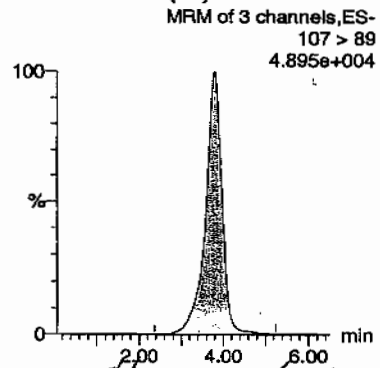


Perchlorate-101



Perchlorate-O(18)



Ammonium Acetate

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06CCV	Perchlorate	99 > 83	3.81	24756.242	24756.242	bb			0.4401	88.02	-11.98	1015.6...	3.02
CL100104-06CCV	Perchlorate-101	101 > 85	3.81	8193.481	8193.481	bb			0.4501	90.02	-9.98	844.527	
CL100104-06CCV	Perchlorate-O(18)	107 > 89	3.79	22077.189	22077.189	bb			0.4578	91.55	-8.45	508.963	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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uantify Sample Report **MassLynx 4.0 SP4**
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

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inted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

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me: 20:06:46
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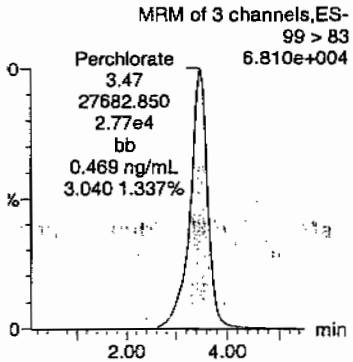
al: 1:2,A

Pass
CWW
01-19-10

ırchlorate



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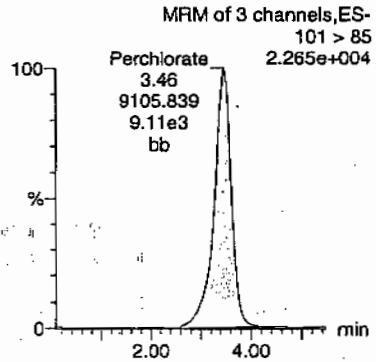

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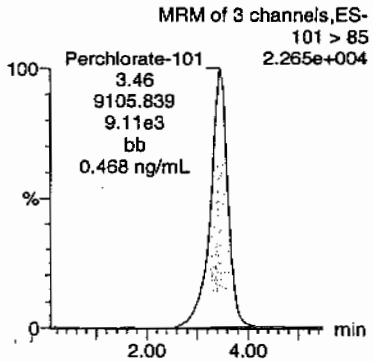
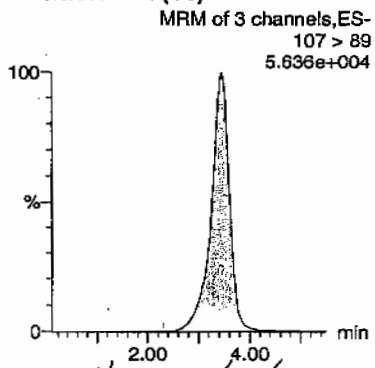


Perchlorate-O(18)



HMW 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-06CCV	Perchlorate	99 > 83	3.47	27682.850	27682.850	bb			0.4692	93.83	-6.17	6142.8...	3.04
CL100118-06CCV	Perchlorate-101	101 > 85	3.46	9105.839	9105.839	bb			0.4681	93.61	-6.39	1064.3...	
CL100118-06CCV	Perchlorate-O(18)	107 > 89	3.45	23031.451	23031.451	bb			0.4600	92.00	-8.00	2025.9...	

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uantify Sample Report MassLynx 4.0 SP4
ie GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

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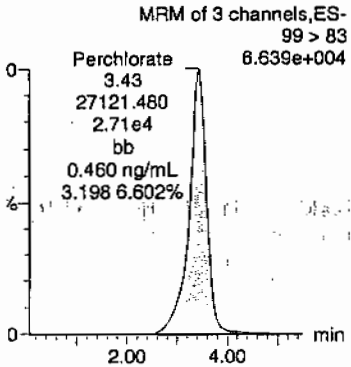
01-19-10

rchlorate



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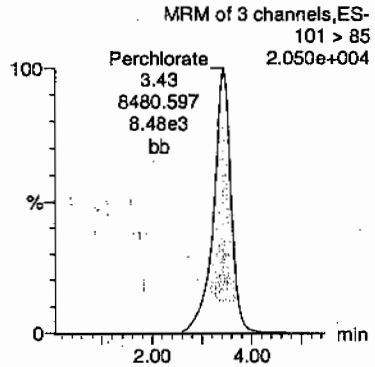

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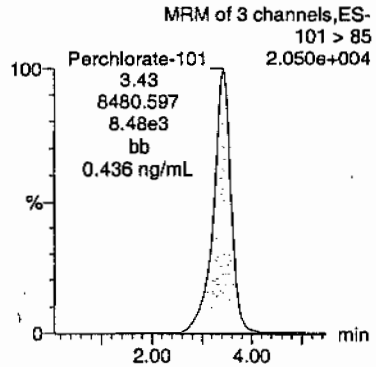

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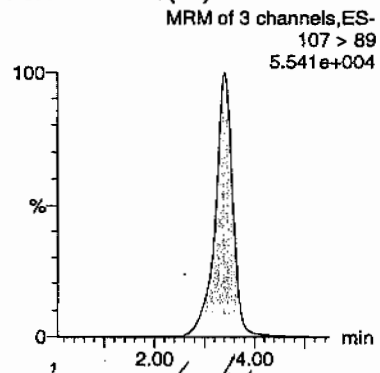

Hmm 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-06CCV	Perchlorate	99 > 83	3.43	27121.480	27121.480	bb			0.4596	91.93	-8.07	546.057	3.20
CL100118-06CCV	Perchlorate-101	101 > 85	3.43	8480.597	8480.597	bb			0.4359	87.18	-12.82	2521.5...	
CL100118-06CCV	Perchlorate-O(18)	107 > 89	3.41	22518.350	22518.350	bb			0.4498	89.95	-10.05	6237.6...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	95.18	15-JAN-10 18:30	per0115011a
Perchlorate Isotope Ratio		2.8		15-JAN-10 18:30	per0115011a
Perchlorate-101	.05	.05	105.09	15-JAN-10 18:30	per0115011a
Perchlorate	.05	.05	96.83	15-JAN-10 19:36	per0115018a
Perchlorate Isotope Ratio		3.23		15-JAN-10 19:36	per0115018a
Perchlorate-101	.05	.05	92.61	15-JAN-10 19:36	per0115018a
Perchlorate	.05	.05	90.97	15-JAN-10 21:02	per0115027a
Perchlorate Isotope Ratio		2.84		15-JAN-10 21:02	per0115027a
Perchlorate-101	.05	.05	98.99	15-JAN-10 21:02	per0115027a
Perchlorate	.05	.04	88.68	15-JAN-10 23:07	per0115040a
Perchlorate Isotope Ratio		2.94		15-JAN-10 23:07	per0115040a

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161-1

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	93.11	15-JAN-10 23:07	per0115040a
Perchlorate	.05	.05	92.67	16-JAN-10 03:06	per0115065a
Perchlorate Isotope Ratio		3.43		16-JAN-10 03:06	per0115065a
Perchlorate-101	.05	.04	83.47	16-JAN-10 03:06	per0115065a
Perchlorate	.05	.05	91.89	16-JAN-10 05:10	per0115078a
Perchlorate Isotope Ratio		2.92		16-JAN-10 05:10	per0115078a
Perchlorate-101	.05	.05	97.24	16-JAN-10 05:10	per0115078a
Perchlorate	.05	.05	95.25	16-JAN-10 07:05	per0115090a
Perchlorate Isotope Ratio		3.29		16-JAN-10 07:05	per0115090a
Perchlorate-101	.05	.04	89.51	16-JAN-10 07:05	per0115090a
Perchlorate	.05	.05	99.3	18-JAN-10 18:41	per0118011a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161-1

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		2.89		18-JAN-10 18:41	per0118011a
Perchlorate-101	.05	.05	104.26	18-JAN-10 18:41	per0118011a
Perchlorate	.05	.05	98.29	18-JAN-10 20:23	per0118023a
Perchlorate Isotope Ratio		3.3		18-JAN-10 20:23	per0118023a
Perchlorate-101	.05	.05	90.43	18-JAN-10 20:23	per0118023a
Perchlorate	.05	.05	94.16	18-JAN-10 22:15	per0118036a
Perchlorate Isotope Ratio		3.13		18-JAN-10 22:15	per0118036a
Perchlorate-101	.05	.05	91.22	18-JAN-10 22:15	per0118036a

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

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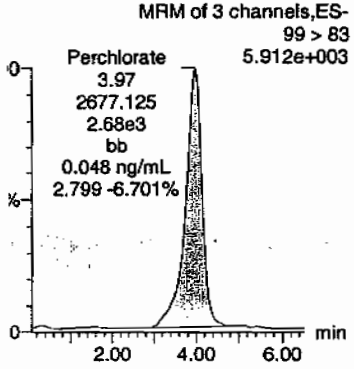
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ıme: per0115011a
ıte: 15-Jan-2010
me: 18:30:12
: WCL100104-07CRI
al: 1:2,B

Pass
aw
01-18-10

ırchlorate



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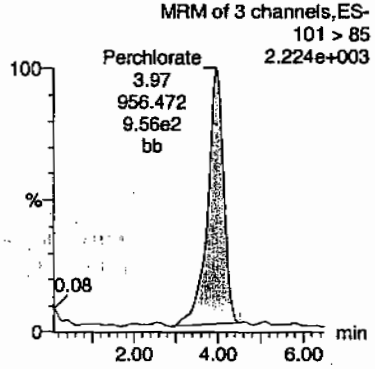
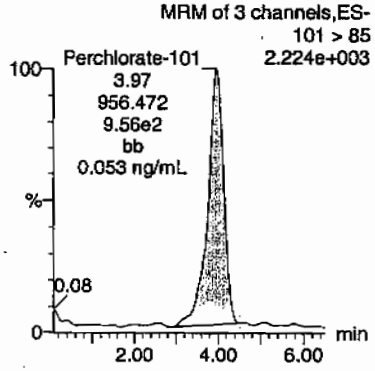
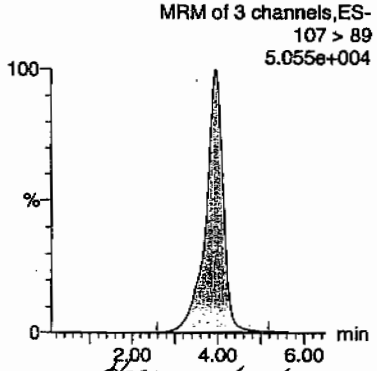


Perchlorate-101



Perchlorate-O(18)



AMM 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.97	2677.125	2677.125	bb			0.0476	95.18	-4.82	233.778	2.80
CL100104-07CRI	Perchlorate-101	101 > 85	3.97	956.472	956.472	bb			0.0525	105.09	5.09	322.926	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.95	23597.420	23597.420	bb			0.4893	97.86	-2.14	3376.5...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

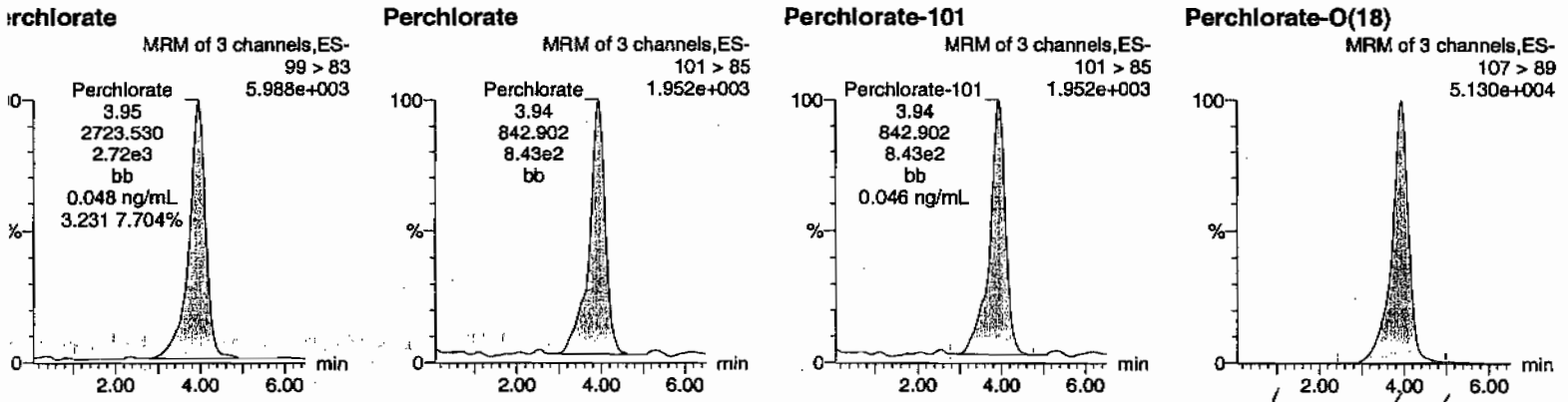
uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ıst Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ıme: per0115018a
ıte: 15-Jan-2010
me: 19:36:59
: WCL100104-07CRI
al: 1:2,B

Pass
aw
01-18-10



HMW 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.95	2723.530	2723.530	bb			0.0484	96.83	-3.17	130.049	3.23
CL100104-07CRI	Perchlorate-101	101 > 85	3.94	842.902	842.902	bb			0.0463	92.61	-7.39	52.552	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.93	23520.729	23520.729	bb			0.4877	97.54	-2.46	3968.1...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
ie GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ıme: per0115027a
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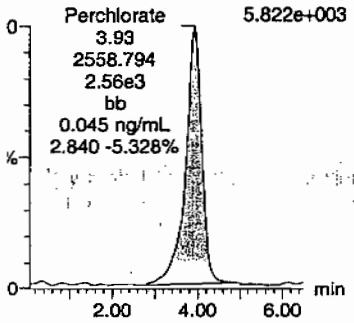
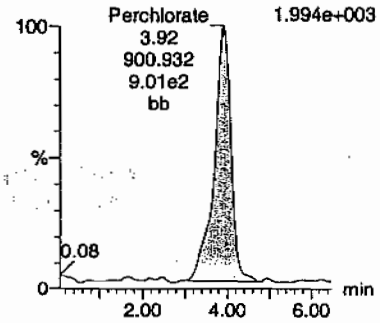
Pass
aw
01-18-10

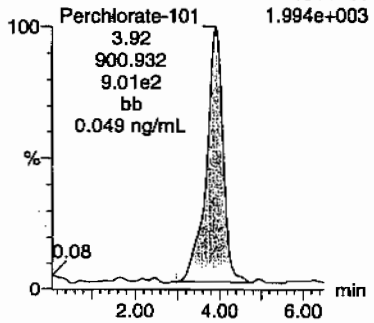
rchlorate



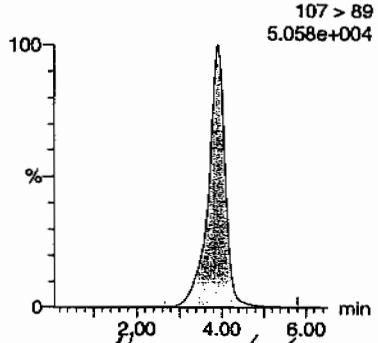
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Amc 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.93	2558.794	2558.794	bb			0.0455	90.97	-9.03	133.718	2.84
CL100104-07CRI	Perchlorate-101	101 > 85	3.92	900.932	900.932	bb			0.0495	98.99	-1.01	22.594	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.92	23482.980	23482.980	bb			0.4869	97.38	-2.62	612.804	

:L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charlers W. Wilson

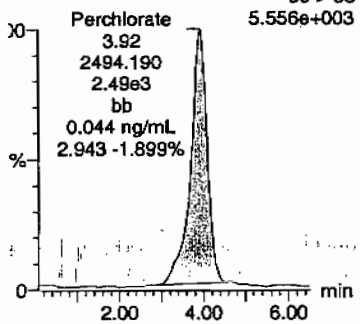
ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

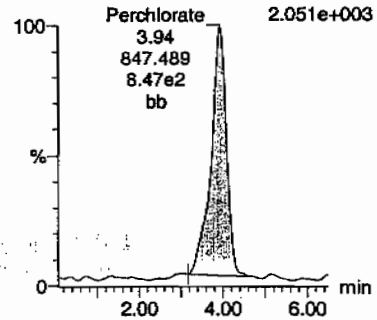
ame: per0115040a
ate: 15-Jan-2010
me: 23:07:00
: WCL100104-07CRI
al: 1:2,B

Pass
aw
01-18-10

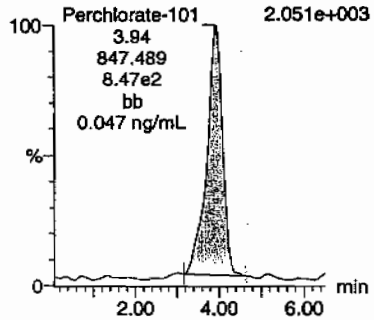
erchlorate



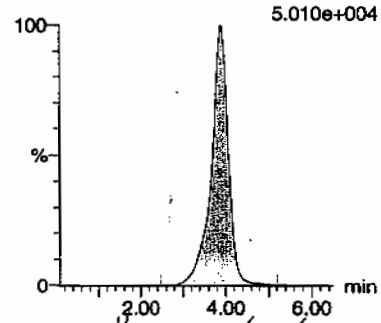
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HWM 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.92	2494.190	2494.190	bb			0.0443	88.68	-11.32	146.232	2.94
CL100104-07CRI	Perchlorate-101	101 > 85	3.94	847.489	847.489	bb			0.0466	93.11	-6.89	50.462	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.89	22963.768	22963.768	bb			0.4761	95.23	-4.77	771.020	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ıme: per0115065a
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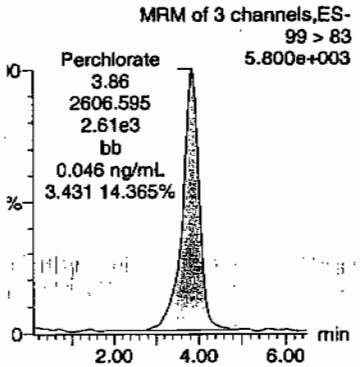
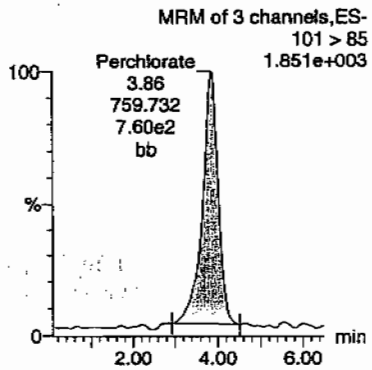
me: 03:06:08
: WCL100104-07CRI
al: 1:2,B

Pass
aw
01-18-10

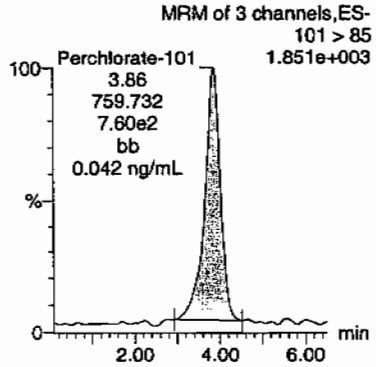
ırchlorate



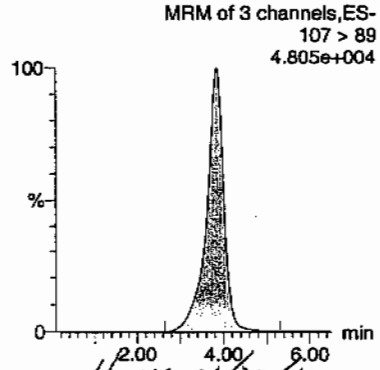
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.86	2606.595	2606.595	bb			0.0463	92.67	-7.33	186.366	3.43
CL100104-07CRI	Perchlorate-101	101 > 85	3.86	759.732	759.732	bb			0.0417	83.47	-16.53	145.249	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.84	21961.199	21961.199	bb			0.4554	91.07	-8.93	2713.8...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

ıst Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115078a
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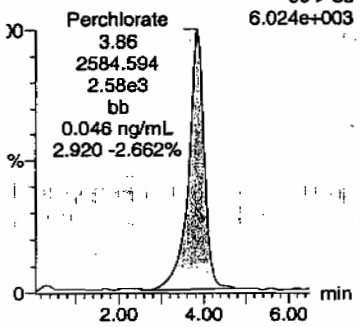
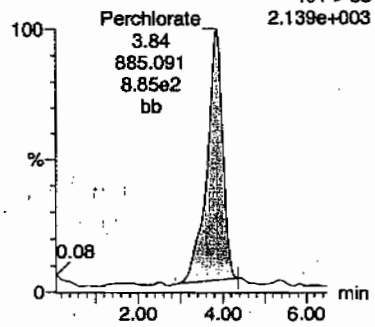
: WCL100104-07CRI
al: 1:2,B

Pass
aw
1-18-10

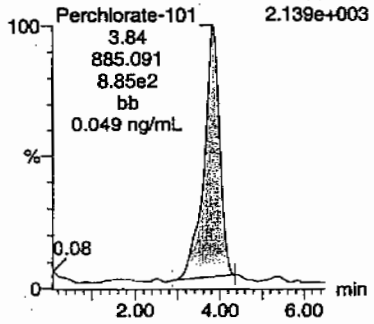
erchlorate



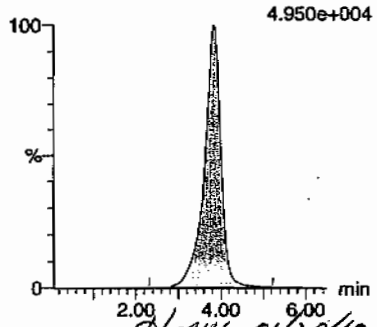
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.86	2584.594	2584.594	bb			0.0459	91.89	-8.11	341.808	2.92
CL100104-07CRI	Perchlorate-101	101 > 85	3.84	885.091	885.091	bb			0.0486	97.24	-2.76	209.195	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.84	22375.828	22375.828	bb			0.4640	92.79	-7.21	213.731	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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ıantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

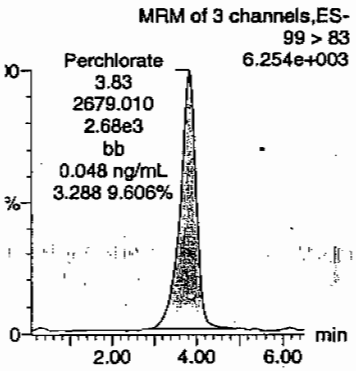
ıtaset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

.st Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
inted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

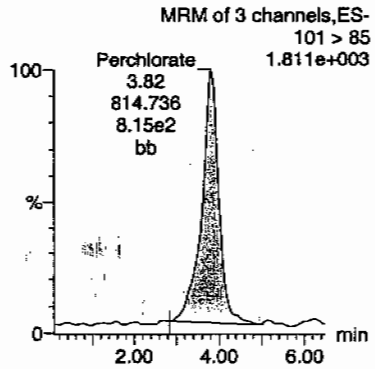
ıme: per0115090a
ıte: 16-Jan-2010
me: 07:05:24
: WCL100104-07CRI
al: 1:2,B

Pass
aw
01-18-10

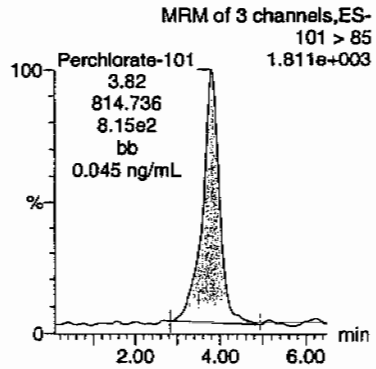
ırchlorate



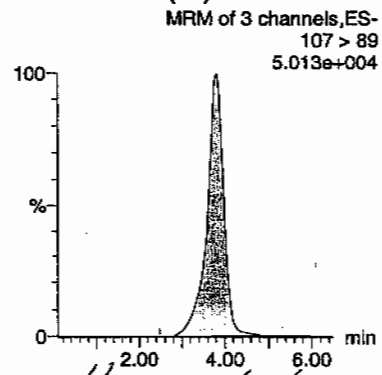
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-07CRI	Perchlorate	99 > 83	3.83	2679.010	2679.010	bb			0.0476	95.25	-4.75	113.630	3.29
CL100104-07CRI	Perchlorate-101	101 > 85	3.82	814.736	814.736	bb			0.0448	89.51	-10.49	25.948	
CL100104-07CRI	Perchlorate-O(18)	107 > 89	3.81	22401.332	22401.332	bb			0.4645	92.90	-7.10	3507.4...	

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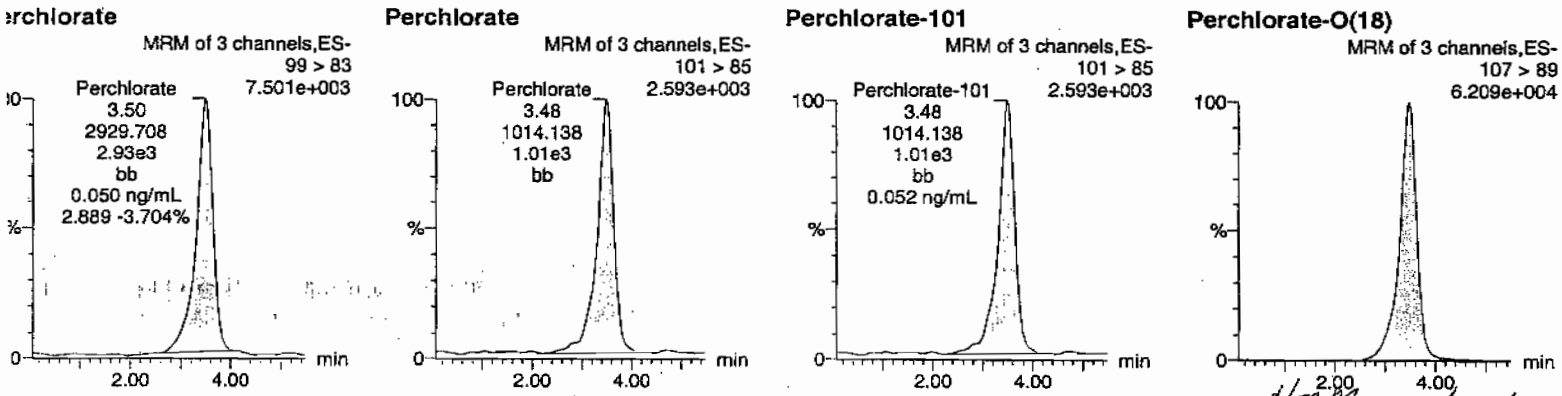
uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ıst Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
inted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

PASS
CWW
01-19-10

ame: per0118011a
ate: 18-Jan-2010
me: 18:41:15
: WCL100118-07CRI
al: 1:2,B



HAM 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-07CRI	Perchlorate	99 > 83	3.50	2929.708	2929.708	bb			0.0497	99.30	-0.70	386.620	2.89
CL100118-07CRI	Perchlorate-101	101 > 85	3.48	1014.138	1014.138	bb			0.0521	104.26	4.26	225.019	
CL100118-07CRI	Perchlorate-O(18)	107 > 89	3.47	25097.045	25097.045	bb			0.5013	100.25	0.25	1981.7...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

uantify Sample Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

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rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

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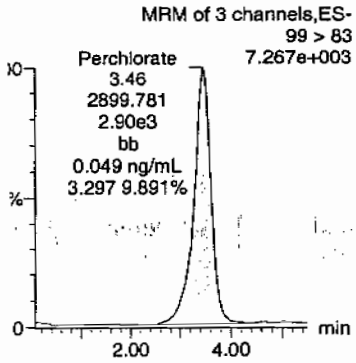
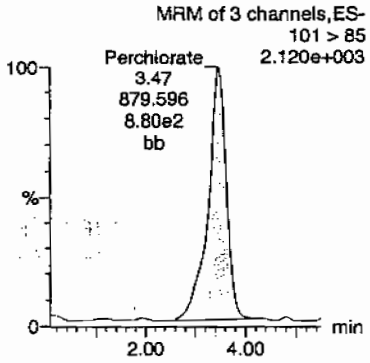
Rev
aw
01-19-10

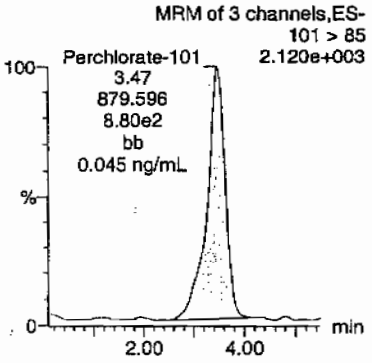
erchlorate



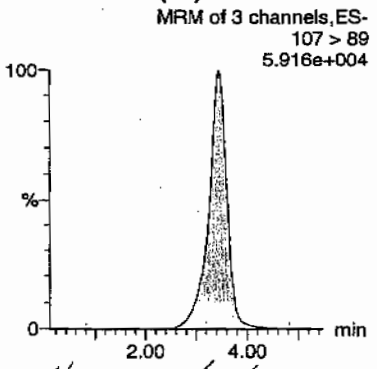
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-07CRI	Perchlorate	99 > 83	3.46	2899.781	2899.781	bb			0.0491	98.29	-1.71	512.658	3.30
CL100118-07CRI	Perchlorate-101	101 > 85	3.47	879.596	879.596	bb			0.0452	90.43	-9.57	137.741	
CL100118-07CRI	Perchlorate-O(18)	107 > 89	3.45	24250.887	24250.887	bb			0.4844	96.87	-3.13	1435.0...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ıst Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
inted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

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ate: 18-Jan-2010
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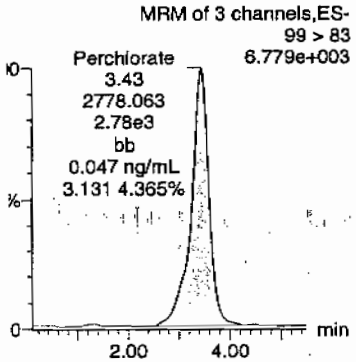
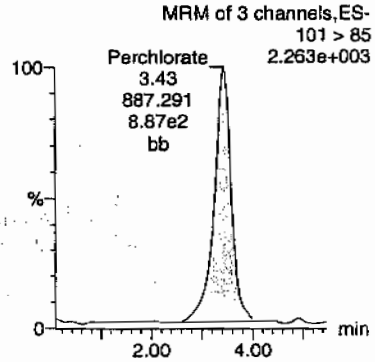
Pass
aw
01-19-10

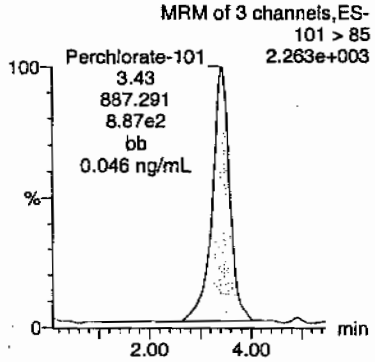
erchlorate



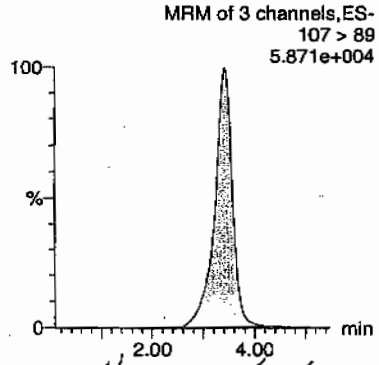
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-07CRI	Perchlorate	99 > 83	3.43	2778.063	2778.063	bb			0.0471	94.16	-5.84	482.859	3.13
CL100118-07CRI	Perchlorate-101	101 > 85	3.43	887.291	887.291	bb			0.0456	91.22	-8.78	29.944	
CL100118-07CRI	Perchlorate-O(18)	107 > 89	3.42	23562.180	23562.180	bb			0.4706	94.12	-5.88	2088.9...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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QUALITY CONTROL

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
MB

Date Received: 15-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 1202011832

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	18-JAN-10 21:06	per0118028a
	Perchlorate Isotope Ratio						1	18-JAN-10 21:06	per0118028a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	18-JAN-10 21:06	per0118028a
	Perchlorate-O(18)			4.86	ug/kg		1	18-JAN-10 21:06	per0118028a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

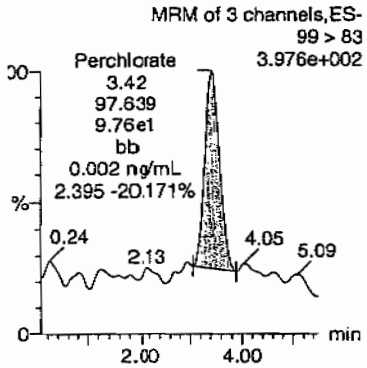
ast Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
rinted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ame: per0118028a
ate: 18-Jan-2010
ime: 21:06:56
): 1202011832
ial: 1:5,A

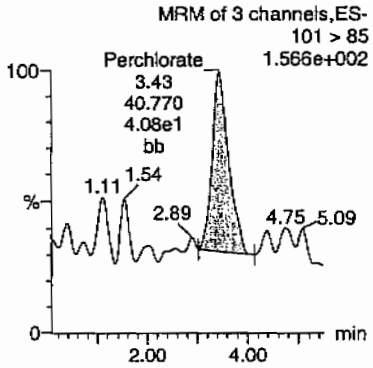
|LANL|940145|50L20|MB|1|RA

GW 01-19-10

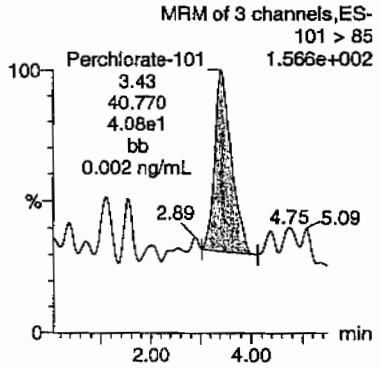
erchlorate



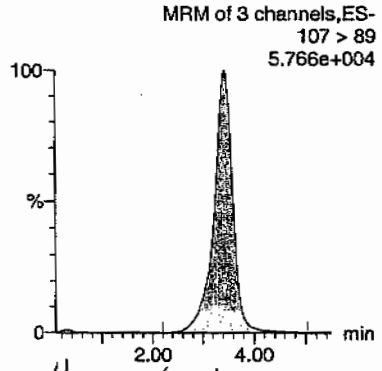
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
02011832	Perchlorate	99 > 83	3.42	97.639	97.639	bb			0.0017			35.669	2.39
02011832	Perchlorate-101	101 > 85	3.43	40.770	40.770	bb			0.0021			9.811	
02011832	Perchlorate-O(18)	107 > 89	3.43	24330.328	24330.328	bb			0.4860	97.19	-2.81	2392.8...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 15-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 1202011833

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	1.94	ug/kg	J	1	18-JAN-10 21:15	per0118029a
	Perchlorate Isotope Ratio			3.15			1	18-JAN-10 21:15	per0118029a
14797-73-0	Perchlorate-101	.5	2	1.87	ug/kg	J	1	18-JAN-10 21:15	per0118029a
	Perchlorate-O(18)			4.80	ug/kg		1	18-JAN-10 21:15	per0118029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

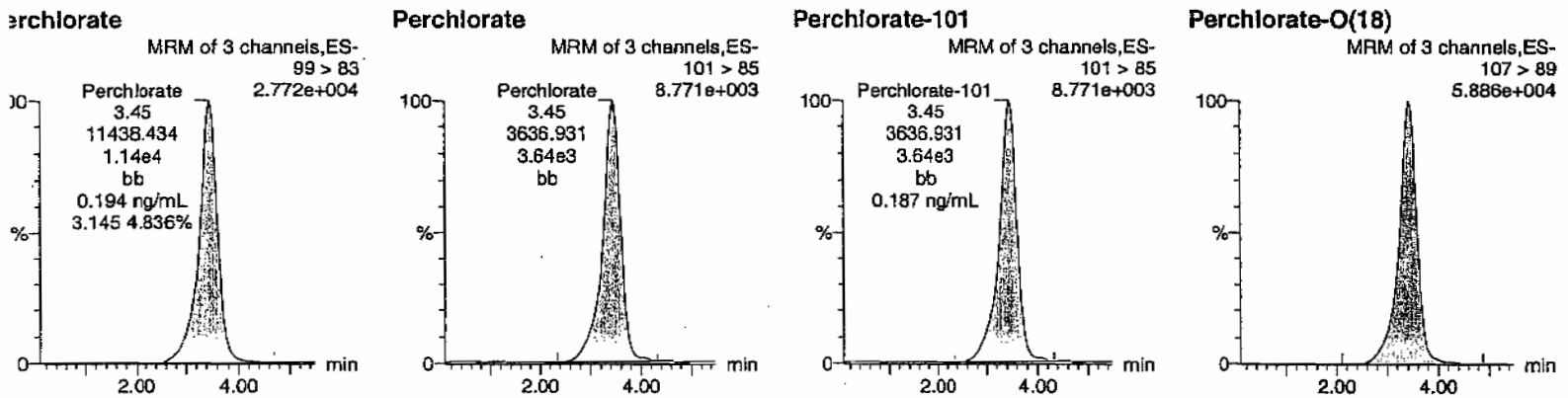
ataset: C:\MassLynx\Perchlorate.PRO\per011810a.qld

ıst Altered: Tuesday, January 19, 2010 8:07:30 AM Eastern Standard Time
·inted: Tuesday, January 19, 2010 8:08:48 AM Eastern Standard Time

ame: per0118029a
ate: 18-Jan-2010
me: 21:15:29
: 1202011833
al: 1:5,B

|LANL|940145|50120|L15|1)RA

CWW
01-19-10



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
:02011833	Perchlorate	99 > 83	3.45	11438.434	11438.434	bb			0.1939	96.93	-3.07	4383.0...	3.15
:02011833	Perchlorate-101	101 > 85	3.45	3636.931	3636.931	bb			0.1869	93.47	-6.53	151.460	
:02011833	Perchlorate-O(18)	107 > 89	3.43	24027.316	24027.316	bb			0.4799	95.98	-4.02	1030.6...	

$$\frac{11438.434}{59004.7} = 0.19385$$

HWW 01/20/10

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7734MS

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 1202011834

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.5

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.535	2.14	2.07	ug/kg	J	1	16-JAN-10 03:44	per0115069a
	Perchlorate Isotope Ratio			3.04			1	16-JAN-10 03:44	per0115069a
14797-73-0	Perchlorate-101	.535	2.14	2.10	ug/kg	J	1	16-JAN-10 03:44	per0115069a
	Perchlorate-O(18)			5.08	ug/kg		1	16-JAN-10 03:44	per0115069a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

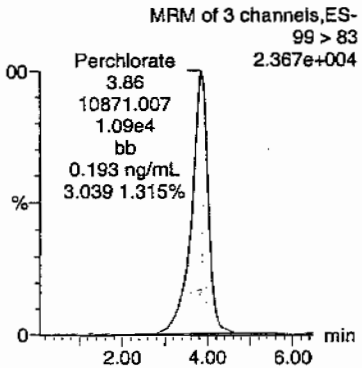
ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115069a
ate: 16-Jan-2010
ime: 03:44:27
): 1202011834
ial: 2:2,D

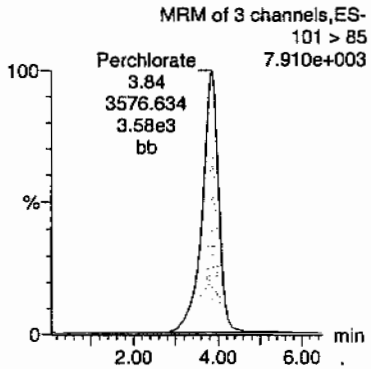
|LANL|940145|SOLID|MS|1|

CWW 01-18-10

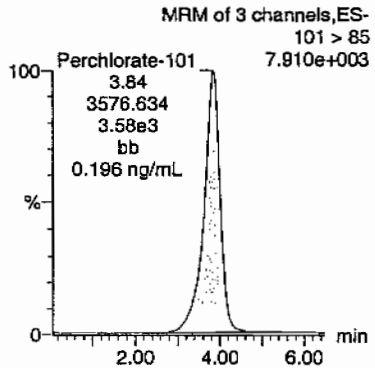
erchlorate



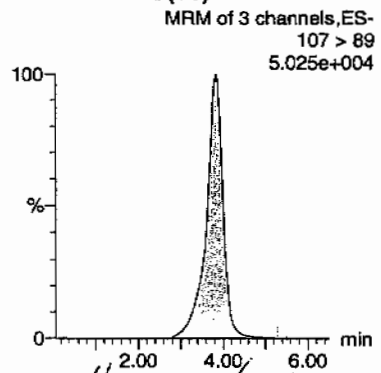
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmw 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202011834	Perchlorate	99 > 83	3.86	10871.007	10871.007	bb			0.1932	96.62	-3.38	830.558	3.04
202011834	Perchlorate-101	101 > 85	3.84	3576.634	3576.634	bb			0.1965	98.24	-1.76	1284.7...	
202011834	Perchlorate-O(18)	107 > 89	3.83	22884.182	22884.182	bb			0.4745	94.90	-5.10	3857.4...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940143

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7734MSD

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-1

GEL Sample ID: 1202011835

Date Filtered: 15-JAN-10

Injection Volume (uL): 20

%Solids: 93.5

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.535	2.14	2.11	ug/kg	J	1	16-JAN-10 03:53	per0115070a
	Perchlorate Isotope Ratio			3.11			1	16-JAN-10 03:53	per0115070a
14797-73-0	Perchlorate-101	.535	2.14	2.09	ug/kg	J	1	16-JAN-10 03:53	per0115070a
	Perchlorate-O(18)			4.95	ug/kg		1	16-JAN-10 03:53	per0115070a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011510a.qld

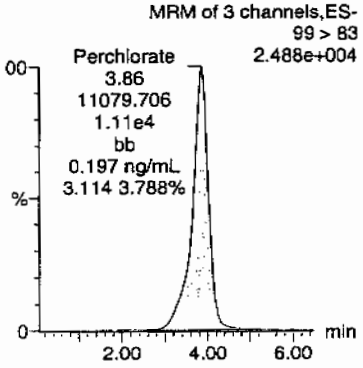
ast Altered: Monday, January 18, 2010 9:03:33 AM Eastern Standard Time
rinted: Monday, January 18, 2010 9:06:21 AM Eastern Standard Time

ame: per0115070a
ate: 16-Jan-2010
ime: 03:53:58
): 1202011835
ial: 2:2,E

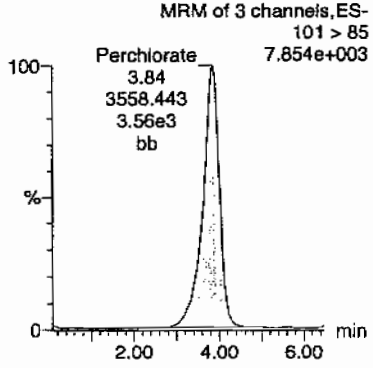
|LANL | 940145 | 50020 | MSD | 1 |

01-18-10

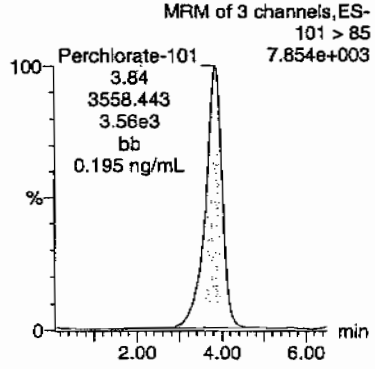
erchlorate



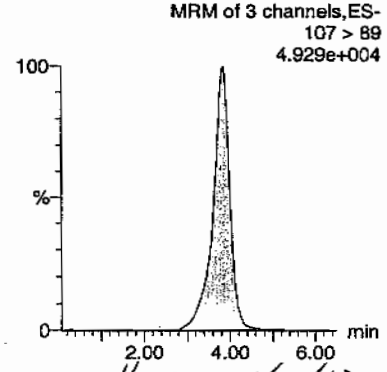
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/20/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202011835	Perchlorate	99 > 83	3.86	11079.706	11079.706	bb			0.1970	98.48	-1.52	1580.6...	3.11
202011835	Perchlorate-101	101 > 85	3.84	3558.443	3558.443	bb			0.1955	97.74	-2.26	488.593	
202011835	Perchlorate-O(18)	107 > 89	3.83	22296.293	22296.293	bb			0.4623	92.46	-7.54	3267.3...	

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MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 940143 **Verified by:**
Analyst: Jareth Shirley
Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6
Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202011832 MB	15-JAN-2010 11:56:19	2	20	10
1202011833 LCS	15-JAN-2010 11:56:19	2	20	10
244222001	15-JAN-2010 11:56:19	2	20	10
244222002	15-JAN-2010 11:56:19	2	20	10
244222003	15-JAN-2010 11:56:19	2	20	10
244222004	15-JAN-2010 11:56:19	2	20	10
244222005	15-JAN-2010 11:56:19	2	20	10
244227001	15-JAN-2010 11:56:19	2	20	10
1202011834 MS (244227001)	15-JAN-2010 11:56:19	2	20	10
1202011835 MSD (244227001)	15-JAN-2010 11:56:19	2	20	10
244227002	15-JAN-2010 11:56:19	2	20	10
244227003	15-JAN-2010 11:56:19	2	20	10
244227004	15-JAN-2010 11:56:19	2	20	10
244227005	15-JAN-2010 11:56:19	2	20	10
244227006	15-JAN-2010 11:56:19	2	20	10
244227007	15-JAN-2010 11:56:19	2	20	10
244227008	15-JAN-2010 11:56:19	2	20	10
244227009	15-JAN-2010 11:56:19	2	20	10
244227010	15-JAN-2010 11:56:19	2	20	10
244227011	15-JAN-2010 11:56:19	2	20	10
244227012	15-JAN-2010 11:56:19	2	20	10
244227013	15-JAN-2010 11:56:19	2	20	10
244227014	15-JAN-2010 11:56:19	2	20	10
244227015	15-JAN-2010 11:56:19	2	20	10
1202011836 ICS	15-JAN-2010 11:56:19	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202011836	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL
LCS	1202011833	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL
MS	1202011834	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL
MSD	1202011835	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL

Comments:
Desalting cartridges used: 091123-1-H & 090413-1-Ba

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GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS#2

Date: 01/15/10 Method: EPA 6850-Modified Reviewed BY: Anne
Extr. Injection Volume: 20uL Int. Std.: UCL091019-03.2 Date: 01/20/10
Sequence Number: per011510a Mobile Phase Lot#: 1254342, 1246195 SOP: GL-OA-E-067 Rev.6
Initial Calibration Date: 01/15/10 Standard-Samp Reagent Lot#:: 1233976 Alt Check Std. ID: WCL100104-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0115001a	IPB001	CWW	1/15/2010 16:54			1		USE	B
per0115002a	IPB001	CWW	1/15/2010 17:04			1		USE	B
per0115003a	WCLICAL-01	CWW	1/15/2010 17:13			1		USE	I
per0115004a	WCLICAL-02	CWW	1/15/2010 17:23			1		USE	I
per0115005a	WCLICAL-03	CWW	1/15/2010 17:33			1		USE	I
per0115006a	WCLICAL-04	CWW	1/15/2010 17:42			1		USE	I
per0115007a	WCLICAL-05	CWW	1/15/2010 17:52			1		USE	I
per0115008a	IPB002	CWW	1/15/2010 18:01			1		USE	B
per0115009a	WCLICV	CWW	1/15/2010 18:11			1		USE	C
per0115010a	IPB003	CWW	1/15/2010 18:20			1		USE	B
per0115011a	WCLCRI	CWW	1/15/2010 18:30			1		USE	C
per0115012a	1202016608	CWW	1/15/2010 18:39	942037	WS-162	1	PTQA	USE	S
per0115013a	1202016610	CWW	1/15/2010 18:49	942037	WS-162	1	PTQA	USE	S
per0115014a	244609019	CWW	1/15/2010 18:58	942037	WS-162	10	PTQA	USE	S
per0115015a	1202016609	CWW	1/15/2010 19:08	942037	WS-162	10	PTQA	USE	S
per0115016a	WCLCCV	CWW	1/15/2010 19:17			1		USE	C
per0115017a	IPB004	CWW	1/15/2010 19:27			1		USE	B
per0115018a	WCLCRI	CWW	1/15/2010 19:36			1		USE	C
per0115019a	1202016599	CWW	1/15/2010 19:46	942034	244603	1	EMAX	USE	S
per0115020a	1202016600	CWW	1/15/2010 19:56	942034	244603	1	EMAX	USE	S
per0115021a	1202016603	CWW	1/15/2010 20:05	942034	244603	1	EMAX	USE	S
per0115022a	244603001	CWW	1/15/2010 20:15	942034	244603	1	EMAX	USE	S
per0115023a	1202016601	CWW	1/15/2010 20:24	942034	244603	1	EMAX	USE	S
per0115024a	1202016602	CWW	1/15/2010 20:34	942034	244603	1	EMAX	USE	S
per0115025a	WCLCCV	CWW	1/15/2010 20:43			1		USE	C
per0115026a	IPB005	CWW	1/15/2010 20:53			1		USE	B
per0115027a	WCLCRI	CWW	1/15/2010 21:02			1		USE	C
per0115028a	1202011852	CWW	1/15/2010 21:12	940158	VARIOUS	1	LANL	USE	S
per0115029a	1202011853	CWW	1/15/2010 21:21	940158	VARIOUS	1	LANL	USE	S

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per0115030a	1202011858	CWW	1/15/2010 21:31	940158	VARIOUS	1	LANL	USE	S
per0115031a	244129001	CWW	1/15/2010 21:41	940158	10-1132-1	1	LANL	USE	S
per0115032a	244129002	CWW	1/15/2010 21:50	940158	10-1132-1	1	LANL	USE	S
per0115033a	244129003	CWW	1/15/2010 22:00	940158	10-1132-1	1	LANL	USE	S
per0115034a	244145001	CWW	1/15/2010 22:09	940158	10-1128-1	1	LANL	USE	S
per0115035a	244149001	CWW	1/15/2010 22:19	940158	10-1147	1	LANL	USE	S
per0115036a	244208001	CWW	1/15/2010 22:28	940158	10-1159-1	1	LANL	USE	S
per0115037a	244208002	CWW	1/15/2010 22:38	940158	10-1159-1	1	LANL	USE	S
per0115038a	WCLCCV	CWW	1/15/2010 22:47			1		USE	C
per0115039a	IPB006	CWW	1/15/2010 22:57			1		USE	B
per0115040a	WCLCRI	CWW	1/15/2010 23:07			1		USE	C
per0115041a	244213001	CWW	1/15/2010 23:16	940158	10-1154	1	LANL	DUSE-RA	S
per0115042a	244217001	CWW	1/15/2010 23:26	940158	10-1152	1	LANL	DUSE-RA	S
per0115043a	244217002	CWW	1/15/2010 23:35	940158	10-1152	1	LANL	DUSE-RA	S
per0115044a	244226001	CWW	1/15/2010 23:45	940158	10-1161	1	LANL	DUSE-RA	S
per0115045a	1202011854	CWW	1/15/2010 23:54	940158	10-1161	1	LANL	DUSE-RA	S
per0115046a	1202011855	CWW	1/16/2010 0:04	940158	10-1161	1	LANL	DUSE-RA	S
per0115047a	244226002	CWW	1/16/2010 0:13	940158	10-1161	1	LANL	DUSE-RA	S
per0115048a	244236002	CWW	1/16/2010 0:23	940158	10-1169	1	LANL	DUSE-RA	S
per0115049a	244236003	CWW	1/16/2010 0:33	940158	10-1169	1	LANL	DUSE-RA	S
per0115050a	WCLCCV	CWW	1/16/2010 0:42			1		~~FAIL~~ Duse	C
per0115051a	IPB007	CWW	1/16/2010 0:52			1		USE	B Hmm 01/20/10
per0115052a	WCLCRI	CWW	1/16/2010 1:01			1		~~USE~~ Duse	C
per0115053a	244240001	CWW	1/16/2010 1:11	940158	10-1172	1	LANL	DUSE-RA	S
per0115054a	1202011856	CWW	1/16/2010 1:20	940158	10-1172	1	LANL	DUSE-RA	S
per0115055a	1202011857	CWW	1/16/2010 1:30	940158	10-1172	1	LANL	DUSE-RA	S
per0115056a	IPB008	CWW	1/16/2010 1:39			1		USE	B
per0115057a	1202011832	CWW	1/16/2010 1:49	940145	VARIOUS	1	LANL	DUSE-RA	S
per0115058a	1202011833	CWW	1/16/2010 1:59	940145	VARIOUS	1	LANL	DUSE-RA	S
per0115059a	1202011836	CWW	1/16/2010 2:08	940145	VARIOUS	1	LANL	DUSE-RA	S
per0115060a	244222001	CWW	1/16/2010 2:18	940145	10-1150	1	LANL	DUSE-RA	S
per0115061a	244222002	CWW	1/16/2010 2:27	940145	10-1150	1	LANL	DUSE-RA	S
per0115062a	244222003	CWW	1/16/2010 2:37	940145	10-1150	1	LANL	DUSE-RA	S
per0115063a	WCLCCV	CWW	1/16/2010 2:46			1		USE	C
per0115064a	IPB009	CWW	1/16/2010 2:56			1		USE	B
per0115065a	WCLCRI	CWW	1/16/2010 3:06			1		USE	C
per0115066a	244222004	CWW	1/16/2010 3:15	940145	10-1150	1	LANL	USE	S

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per0115067a	244222005	CWW	1/16/2010 3:25	940145	10-1150	1	LANL	USE	S
per0115068a	244227001	CWW	1/16/2010 3:34	940145	10-1161-1	1	LANL	USE	S
per0115069a	1202011834	CWW	1/16/2010 3:44	940145	10-1161-1	1	LANL	USE	S
per0115070a	1202011835	CWW	1/16/2010 3:53	940145	10-1161-1	1	LANL	USE	S
per0115071a	244227002	CWW	1/16/2010 4:03	940145	10-1161-1	1	LANL	USE	S
per0115072a	244227003	CWW	1/16/2010 4:13	940145	10-1161-1	1	LANL	USE	S
per0115073a	244227004	CWW	1/16/2010 4:22	940145	10-1161-1	1	LANL	USE	S
per0115074a	244227005	CWW	1/16/2010 4:32	940145	10-1161-1	1	LANL	USE	S
per0115075a	244227006	CWW	1/16/2010 4:41	940145	10-1161-1	1	LANL	USE	S
per0115076a	WCLCCV	CWW	1/16/2010 4:51			1		USE	C
per0115077a	IPB010	CWW	1/16/2010 5:00			1		USE	B
per0115078a	WCLCRI	CWW	1/16/2010 5:10			1		USE	C
per0115079a	244227007	CWW	1/16/2010 5:20	940145	10-1161-1	1	LANL	USE	S
per0115080a	244227008	CWW	1/16/2010 5:29	940145	10-1161-1	1	LANL	USE	S
per0115081a	244227009	CWW	1/16/2010 5:39	940145	10-1161-1	1	LANL	USE	S
per0115082a	244227010	CWW	1/16/2010 5:48	940145	10-1161-1	1	LANL	USE	S
per0115083a	244227011	CWW	1/16/2010 5:58	940145	10-1161-1	1	LANL	USE	S
per0115084a	244227012	CWW	1/16/2010 6:07	940145	10-1161-1	1	LANL	USE	S
per0115085a	244227013	CWW	1/16/2010 6:17	940145	10-1161-1	1	LANL	USE	S
per0115086a	244227014	CWW	1/16/2010 6:26	940145	10-1161-1	1	LANL	USE	S
per0115087a	244227015	CWW	1/16/2010 6:36	940145	10-1161-1	1	LANL	USE	S
per0115088a	WCLCCV	CWW	1/16/2010 6:46			1		USE	C
per0115089a	IPB011	CWW	1/16/2010 6:55			1		USE	B
per0115090a	WCLCRI	CWW	1/16/2010 7:05			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 01/18/10
Extr. Injection Volume: 20uL
Sequence Number: per011810a
Initial Calibration Date: 01/18/10

Method: EPA 6850-Modified
Int. Std.: UCL091019-03.2
Mobile Phase Lot#: 1254342, 1246195
Standard-Samp Reagent Lot#:: 1233976

Reviewed BY: [illegible]
Date: 01/20/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100104-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0118001a	IPB001	CWW	1/18/2010 17:15			1		USE	B
per0118002a	IPB001	CWW	1/18/2010 17:23			1		USE	B
per0118003a	WCLICAL-01	CWW	1/18/2010 17:32			1		USE	I
per0118004a	WCLICAL-02	CWW	1/18/2010 17:40			1		USE	I
per0118005a	WCLICAL-03	CWW	1/18/2010 17:49			1		USE	I
per0118006a	WCLICAL-04	CWW	1/18/2010 17:58			1		USE	I
per0118007a	WCLICAL-05	CWW	1/18/2010 18:06			1		USE	I
per0118008a	IPB002	CWW	1/18/2010 18:15			1		USE	B
per0118009a	WCLICV	CWW	1/18/2010 18:23			1		USE	C
per0118010a	IPB003	CWW	1/18/2010 18:32			1		USE	B
per0118011a	WCLCRI	CWW	1/18/2010 18:41			1		USE	C
per0118012a	244213001	CWW	1/18/2010 18:49	940158	10-1154	1	LANL	USE	S
per0118013a	244217001	CWW	1/18/2010 18:58	940158	10-1152	1	LANL	USE	S
per0118014a	244217002	CWW	1/18/2010 19:07	940158	10-1152	1	LANL	USE	S
per0118015a	244226001	CWW	1/18/2010 19:15	940158	10-1161	1	LANL	USE	S
per0118016a	1202011854	CWW	1/18/2010 19:24	940158	10-1161	1	LANL	USE	S
per0118017a	1202011855	CWW	1/18/2010 19:32	940158	10-1161	1	LANL	USE	S
per0118018a	244226002	CWW	1/18/2010 19:41	940158	10-1161	1	LANL	USE	S
per0118019a	244236002	CWW	1/18/2010 19:49	940158	10-1169	1	LANL	USE	S
per0118020a	244236003	CWW	1/18/2010 19:58	940158	10-1169	1	LANL	USE	S
per0118021a	WCLCCV	CWW	1/18/2010 20:06			1		USE	C
per0118022a	IPB004	CWW	1/18/2010 20:15			1		USE	B
per0118023a	WCLCRI	CWW	1/18/2010 20:23			1		USE	C
per0118024a	244240001	CWW	1/18/2010 20:32	940158	10-1172	1	LANL	USE	S
per0118025a	1202011856	CWW	1/18/2010 20:41	940158	10-1172	1	LANL	USE	S
per0118026a	1202011857	CWW	1/18/2010 20:49	940158	10-1172	1	LANL	USE	S
per0118027a	IPB005	CWW	1/18/2010 20:58			1		USE	B
per0118028a	1202011832	CWW	1/18/2010 21:06	940145	VARIOUS	1	LANL	USE	S
per0118029a	1202011833	CWW	1/18/2010 21:15	940145	VARIOUS	1	LANL	USE	S

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per0118030a	1202011836	CWW	1/18/2010 21:24	940145	VARIOUS	1	LANL	USE	S
per0118031a	244222001	CWW	1/18/2010 21:32	940145	10-1150	1	LANL	USE	S
per0118032a	244222002	CWW	1/18/2010 21:41	940145	10-1150	1	LANL	USE	S
per0118033a	244222003	CWW	1/18/2010 21:49	940145	10-1150	1	LANL	USE	S
per0118034a	WCLCCV	CWW	1/18/2010 21:58			1		USE	C
per0118035a	IPB006	CWW	1/18/2010 22:06			1		USE	B
per0118036a	WCLCRI	CWW	1/18/2010 22:15			1		USE	C
per0118037a	1202011812	CWW	1/18/2010 22:24	940136	10-1132	1	LANL	USE	S
per0118038a	1202011813	CWW	1/18/2010 22:33	940136	10-1132	1	LANL	USE	S
per0118039a	1202011818	CWW	1/18/2010 22:41	940136	10-1132	1	LANL	USE	S
per0118040a	244128001	CWW	1/18/2010 22:50	940136	10-1132	1	LANL	USE	S
per0118041a	1202011814	CWW	1/18/2010 22:58	940136	10-1132	1	LANL	USE	S
per0118042a	1202011815	CWW	1/18/2010 23:07	940136	10-1132	1	LANL	USE	S
per0118043a	244128002	CWW	1/18/2010 23:15	940136	10-1132	1	LANL	USE	S
per0118044a	244128003	CWW	1/18/2010 23:24	940136	10-1132	1	LANL	USE	S
per0118045a	244128004	CWW	1/18/2010 23:32	940136	10-1132	1	LANL	USE	S
per0118046a	WCLCCV	CWW	1/18/2010 23:41			1		USE	C
per0118047a	IPB007	CWW	1/18/2010 23:50			1		USE	B
per0118048a	WCLCRI	CWW	1/18/2010 23:58			1		USE	C
per0118049a	244128005	CWW	1/19/2010 0:07	940136	10-1132	1	LANL	USE	S
per0118050a	244128006	CWW	1/19/2010 0:15	940136	10-1132	1	LANL	USE	S
per0118051a	244128007	CWW	1/19/2010 0:24	940136	10-1132	1	LANL	USE	S
per0118052a	244128008	CWW	1/19/2010 0:32	940136	10-1132	1	LANL	USE	S
per0118053a	244128009	CWW	1/19/2010 0:41	940136	10-1132	1	LANL	USE	S
per0118054a	244128010	CWW	1/19/2010 0:50	940136	10-1132	1	LANL	USE	S
per0118055a	244128011	CWW	1/19/2010 0:58	940136	10-1132	1	LANL	USE	S
per0118056a	244128012	CWW	1/19/2010 1:07	940136	10-1132	1	LANL	USE	S
per0118057a	WCLCCV	CWW	1/19/2010 1:15			1		USE	C
per0118058a	IPB008	CWW	1/19/2010 1:24			1		USE	B
per0118059a	WCLCRI	CWW	1/19/2010 1:33			1		USE	C
per0118060a	244128013	CWW	1/19/2010 1:41	940136	10-1132	1	LANL	USE	S
per0118061a	244128014	CWW	1/19/2010 1:50	940136	10-1132	1	LANL	USE	S
per0118062a	244128015	CWW	1/19/2010 1:59	940136	10-1132	1	LANL	USE	S
per0118063a	244128016	CWW	1/19/2010 2:07	940136	10-1132	1	LANL	USE	S
per0118064a	244128017	CWW	1/19/2010 2:16	940136	10-1132	1	LANL	USE	S
per0118065a	244128018	CWW	1/19/2010 2:24	940136	10-1132	1	LANL	USE	S
per0118066a	244128019	CWW	1/19/2010 2:33	940136	10-1132	1	LANL	USE	S

per0118067a	244128020	CWW	1/19/2010 2:41	940136	10-1132	1	LANL	USE	S
per0118068a	WCLCCV	CWW	1/19/2010 2:50			1		USE	C
per0118069a	IPB009	CWW	1/19/2010 2:59			1		USE	B
per0118070a	WCLCRI	CWW	1/19/2010 3:07			1		USE	C

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Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1161-2

Method/Analysis Information

Procedure:	**Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**
Analytical Method:	SW846 6850 Modified
Prep Method:	SW846 6850 Modified
Analytical Batch Number:	940129
Prep Batch Number:	940125

Sample Analysis

Sample ID	Client ID
244228001	RE12-10-7709
244228002	RE12-10-7711
244228003	RE12-10-7712
244228004	RE12-10-7716
244228005	RE12-10-7718
244228006	RE12-10-7713
1202011801	Interference Check Sample (ICS)
1202011797	Method Blank (MB)
1202011798	Laboratory Control Sample (LCS)
1202011799	244228001(RE12-10-7709) Matrix Spike (MS)
1202011800	244228001(RE12-10-7709) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

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Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

CCV Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 244228001 (RE12-10-7709) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

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Retention Time
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

Technical Information

Holding Time Specifications
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
The SDG was re-analyzed due to a CVS failing acceptance criteria. The re-analysis passed acceptance criteria and is reported.

Miscellaneous Information

Data Exception (DER) Documentation
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The samples in this SDG were not originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

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Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Heather K Maus **Date:** 01/19/10

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SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7709

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228001

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.593	2.37	0.593	ug/kg	U	1	14-JAN-10 19:39	per0114046a
	Perchlorate Isotope Ratio						1	14-JAN-10 19:39	per0114046a
14797-73-0	Perchlorate-101	.593	2.37	0.593	ug/kg	U	1	14-JAN-10 19:39	per0114046a
	Perchlorate-O(18)			5.62	ug/kg		1	14-JAN-10 19:39	per0114046a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7711

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228002

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.608	2.43	0.608	ug/kg	U	1	14-JAN-10 20:09	per0114049a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:09	per0114049a
14797-73-0	Perchlorate-101	.608	2.43	0.608	ug/kg	U	1	14-JAN-10 20:09	per0114049a
	Perchlorate-O(18)			6.08	ug/kg		1	14-JAN-10 20:09	per0114049a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7712

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228003

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.559	2.23	0.559	ug/kg	U	1	14-JAN-10 20:19	per0114050a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:19	per0114050a
14797-73-0	Perchlorate-101	.559	2.23	0.559	ug/kg	U	1	14-JAN-10 20:19	per0114050a
	Perchlorate-O(18)			5.55	ug/kg		1	14-JAN-10 20:19	per0114050a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7716

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228004

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 95.3

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.525	2.1	0.525	ug/kg	U	1	14-JAN-10 20:29	per0114051a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:29	per0114051a
14797-73-0	Perchlorate-101	.525	2.1	0.525	ug/kg	U	1	14-JAN-10 20:29	per0114051a
	Perchlorate-O(18)			5.23	ug/kg		1	14-JAN-10 20:29	per0114051a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7718

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228005

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.575	2.3	0.575	ug/kg	U	1	14-JAN-10 20:40	per0114052a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:40	per0114052a
14797-73-0	Perchlorate-101	.575	2.3	0.575	ug/kg	U	1	14-JAN-10 20:40	per0114052a
	Perchlorate-O(18)			5.68	ug/kg		1	14-JAN-10 20:40	per0114052a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7713

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228006

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.676	2.71	0.676	ug/kg	U	1	14-JAN-10 20:50	per0114053a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:50	per0114053a
14797-73-0	Perchlorate-101	.676	2.71	0.676	ug/kg	U	1	14-JAN-10 20:50	per0114053a
	Perchlorate-O(18)			6.43	ug/kg		1	14-JAN-10 20:50	per0114053a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Form 5

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1161–2

Extract Batch Code: 940125

Date Filtered: 12–JAN–10

Matrix: SOIL

Sample ID: 1202011798

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.01	ug/kg	100		70 – 130
Perchlorate Isotope Ratio		3.01				–
Perchlorate–101	2.00	2.06	ug/kg	103		70 – 130
Perchlorate–O(18)		5.04	ug/kg			–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1161–2

Extract Batch Code: 940125

Date Filtered: 12–JAN–10

Matrix: SOIL

Sample ID: 1202011801

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.09	ug/kg	104		70 – 130
Perchlorate Isotope Ratio		3.1				
Perchlorate–101	2.00	2.08	ug/kg	104		70 – 130
Perchlorate–O(18)		5.13	ug/kg			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

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nted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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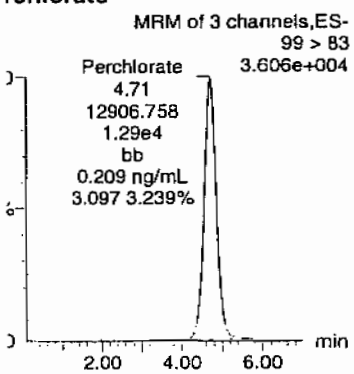
rchlorate



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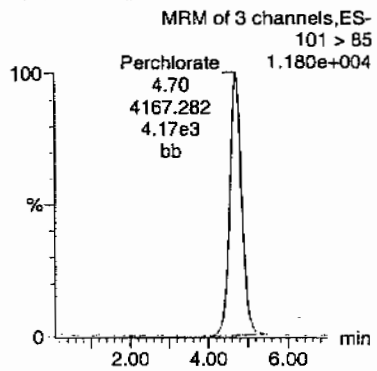

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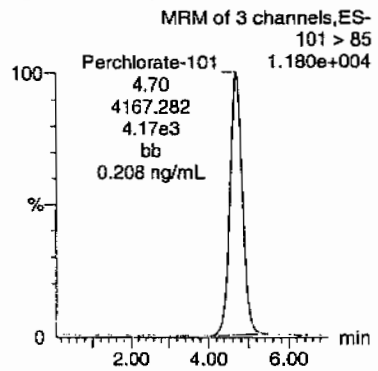

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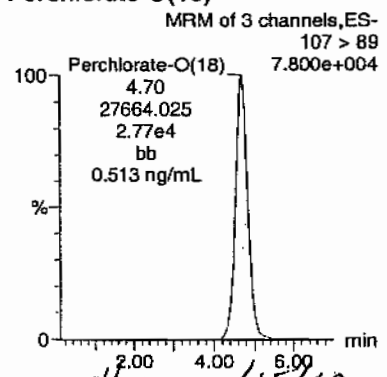

HMM 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
)2011801	Perchlorate	99 > 83	4.71	12906.758	12906.758	bb			0.2089	104.47	4.47	1389.3...	3.10
)2011801	Perchlorate-101	101 > 85	4.70	4167.282	4167.282	bb			0.2080	104.00	4.00	1115.1...	
)2011801	Perchlorate-O(18)	107 > 89	4.70	27664.025	27664.025	bb			0.5128	102.57	2.57	4164.5...	

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Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1161-2

Extract Batch Code: 940125

Date Extracted: 12-JAN-10

GEL MS/PS ID: 1202011799

Client ID: RE12-10-7709

GEL MSD/PSD ID: 1202011800

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.37	0.262	ug/kg	2.64	100	2.57	97.3	2.52	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.23		3.23		0		–
Perchlorate-101	2.37	0.264	ug/kg	2.52	94.9	2.46	92.3	2.46	30	75 – 125
Perchlorate-O(18)	0	5.62	ug/kg	5.88		5.78		1.81		–

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Form 4

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1161–2

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	14–JAN–10	per0114001a	IPB001
Perchlorate–101	0.00	0	NA	14–JAN–10	per0114001a	IPB001
Perchlorate	0.00	0	NA	14–JAN–10	per0114002a	IPB001
Perchlorate–101	0.00	0	NA	14–JAN–10	per0114002a	IPB001

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ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ıst Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
inted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011410a.cdb 15 Jan 2010 07:53:05

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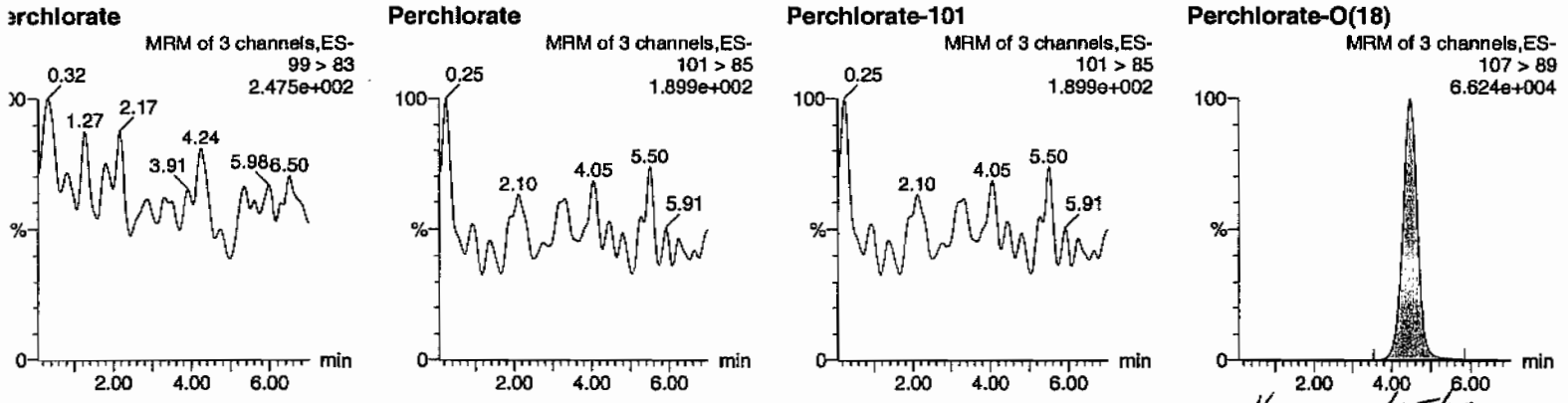

HNM 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B001	Perchlorate	99 > 83											0.00
B001	Perchlorate-101	101 > 85											
B001	Perchlorate-O(18)	107 > 89	4.46	28151.078	28151.078	bb			0.5219	104.37	4.37	5021.0...	

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

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inted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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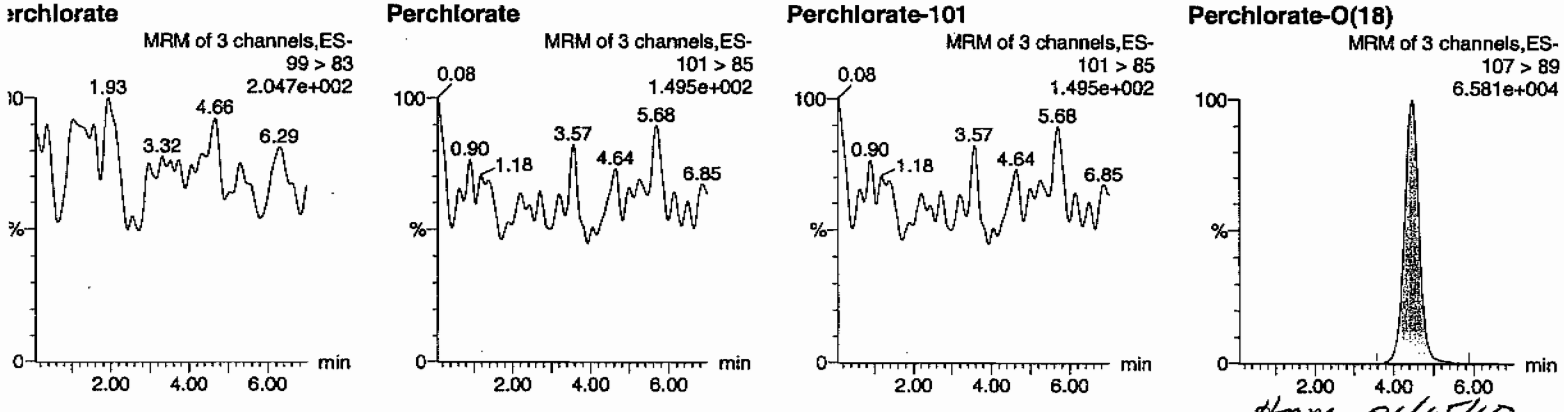

Hnm 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B001	Perchlorate	99 > 83											0.00
B001	Perchlorate-101	101 > 85											
B001	Perchlorate-O(18)	107 > 89	4.45	27733.281	27733.281	bb			0.5141	102.82	2.82	1554.1...	

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161-2

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	14-JAN-10	per0114008a	IPB002
Perchlorate-101	0.00	0	NA	14-JAN-10	per0114008a	IPB002
Perchlorate	0.00	0	NA	14-JAN-10	per0114010a	IPB003
Perchlorate-101	0.00	0	NA	14-JAN-10	per0114010a	IPB003
Perchlorate	0.00	0	NA	14-JAN-10	per0114019a	IPB004
Perchlorate-101	0.00	0	NA	14-JAN-10	per0114019a	IPB004
Perchlorate	0.00	0	NA	14-JAN-10	per0114025a	IPB005
Perchlorate-101	0.00	0	NA	14-JAN-10	per0114025a	IPB005
Perchlorate	0.00	0	NA	14-JAN-10	per0114032a	IPB006
Perchlorate-101	0.00	0	NA	14-JAN-10	per0114032a	IPB006
Perchlorate	0.00	0	NA	14-JAN-10	per0114044a	IPB007
Perchlorate-101	0.00	0	NA	14-JAN-10	per0114044a	IPB007
Perchlorate	0.00	0	NA	14-JAN-10	per0114054a	IPB008

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Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161-2

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	14-JAN-10	per0114054a	IPB008
Perchlorate	0.00	0	NA	14-JAN-10	per0114057a	IPB009
Perchlorate-101	0.00	0	NA	14-JAN-10	per0114057a	IPB009

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ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

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nted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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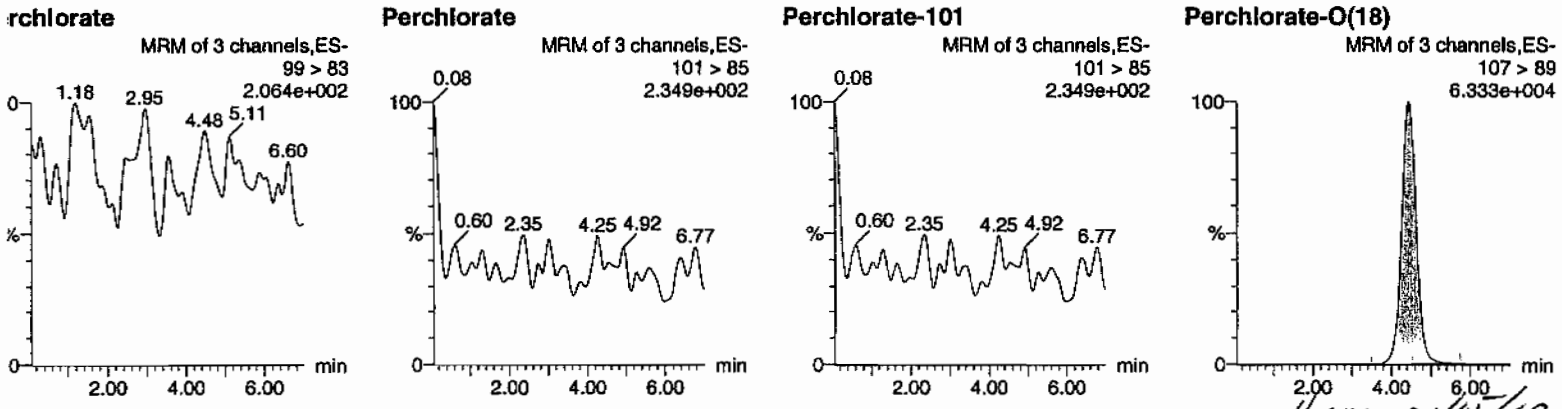

HMM 01/15/10

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3002	Perchlorate-101	101 > 85											
3002	Perchlorate-O(18)	107 > 89	4.44	26947.334	26947.334	bb			0.4995	99.91	-0.09	5879.1...	

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ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

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nted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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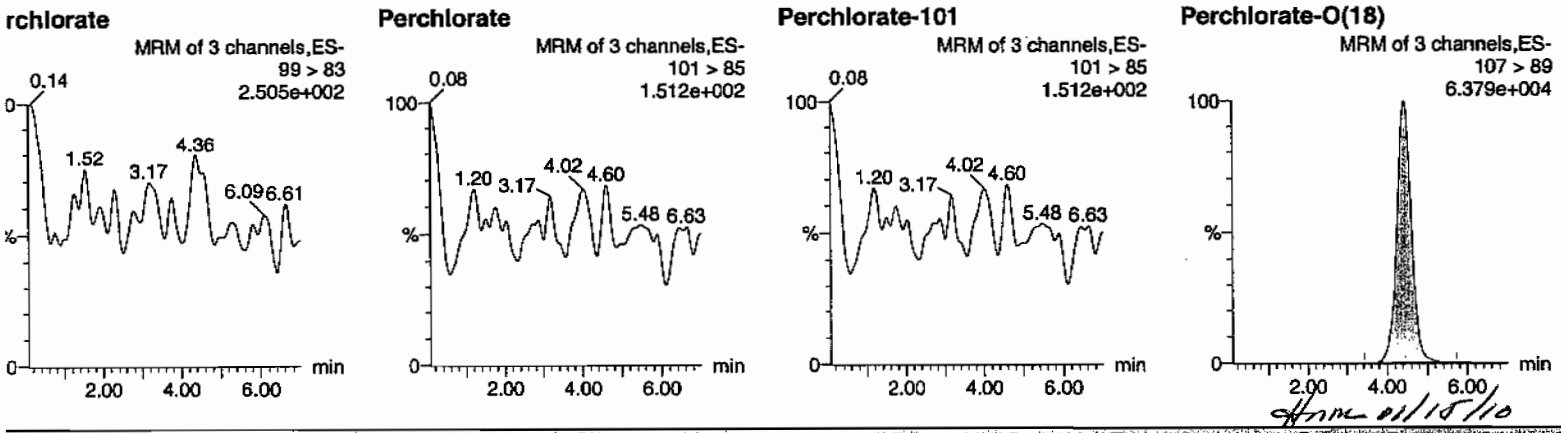

HMM 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3003	Perchlorate	99 > 83											0.00
3003	Perchlorate-101	101 > 85											
3003	Perchlorate-O(18)	107 > 89	4.43	26662.340	26662.340	bb			0.4943	98.85	-1.15	8197.9...	

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e GEL Group, LLC Analyst: Charlers W. Wilson

.taset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

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nted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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ıte: 14-Jan-2010
ne: 15:08:15
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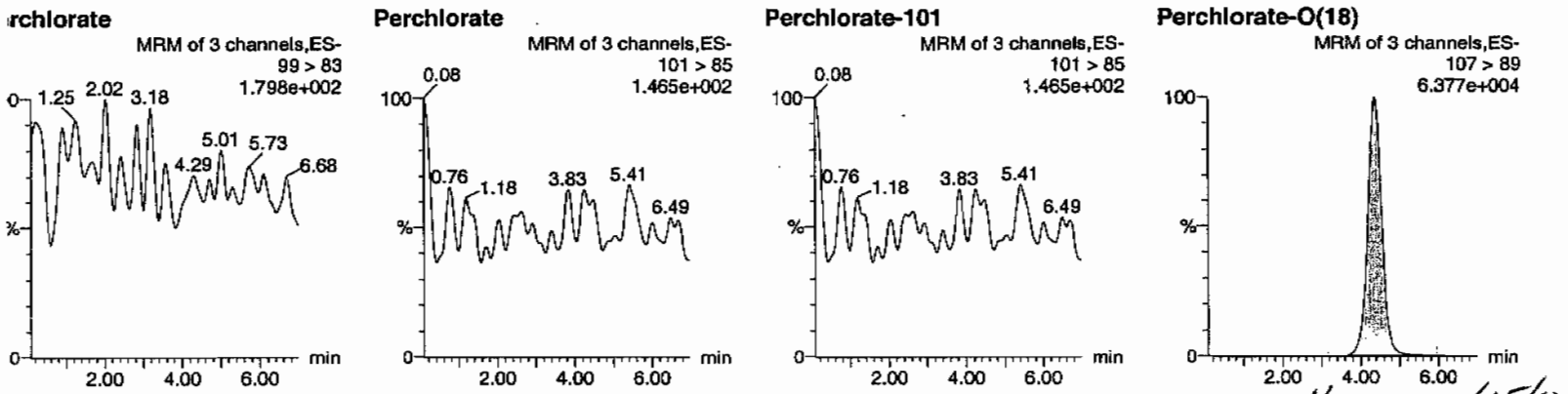

HMM 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B004	Perchlorate	99 > 83											0.00
B004	Perchlorate-101	101 > 85											
B004	Perchlorate-O(18)	107 > 89	4.36	26505.346	26505.346	bb			0.4914	98.27	-1.73	772.109	

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

st Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
nted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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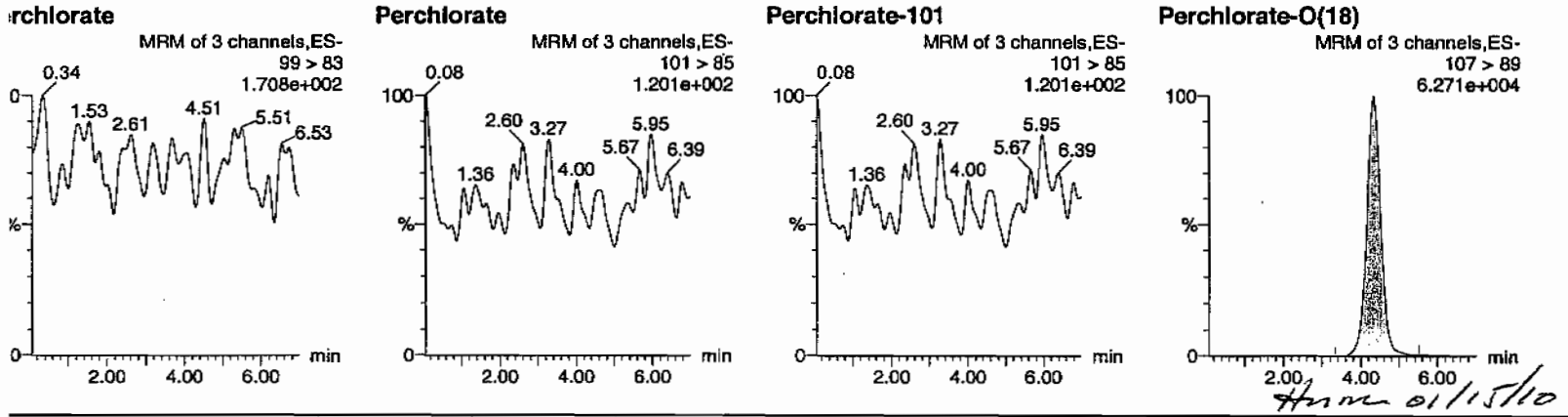
ıte: 14-Jan-2010
ne: 16:08:28
: IPB005
al: 1:1,A

GW
01-15-10



HMM 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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3005	Perchlorate-101	101 > 85											
3005	Perchlorate-O(18)	107 > 89	4.34	26369.939	26369.939	bb			0.4888	97.77	-2.23	1558.9...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

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rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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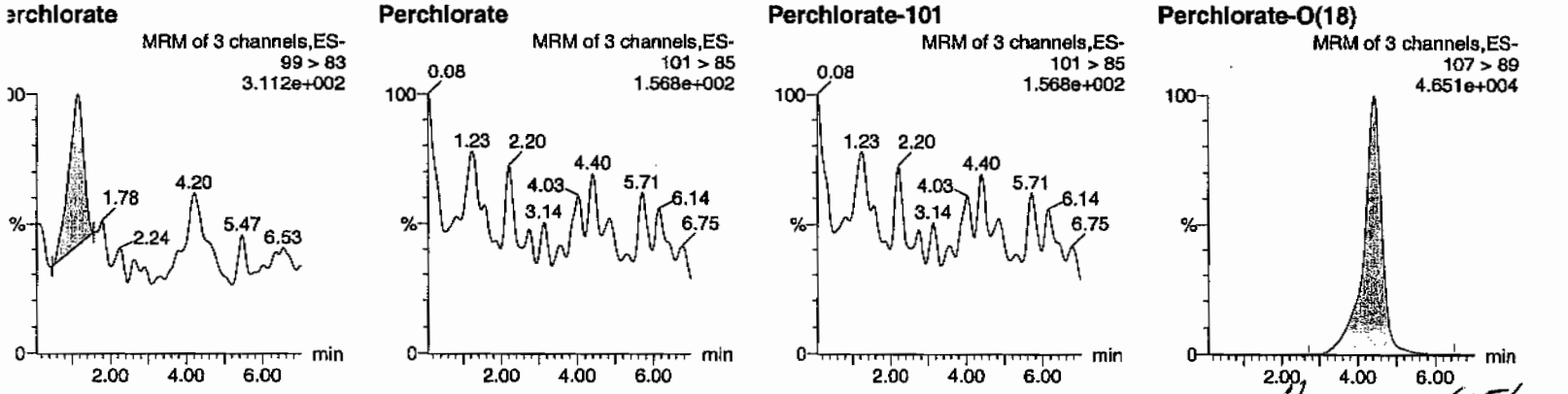
01-15-10



Anne 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B006	Perchlorate	99 > 83	1.15	83.529	83.529	bb			0.0014			6.486	0.00
B006	Perchlorate-101	101 > 85											
B006	Perchlorate-O(18)	107 > 89	4.43	25032.135	25032.135	bb			0.4640	92.81	-7.19	3012.7...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

:st Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
inted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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ıte: 14-Jan-2010
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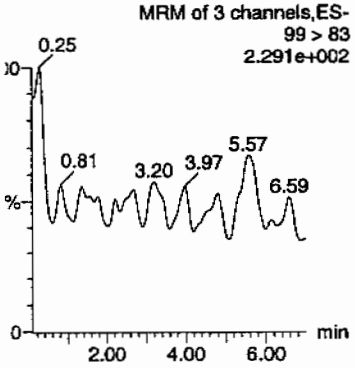
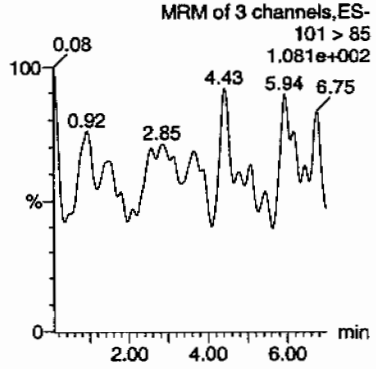
al: 1:1,A

01-15-10

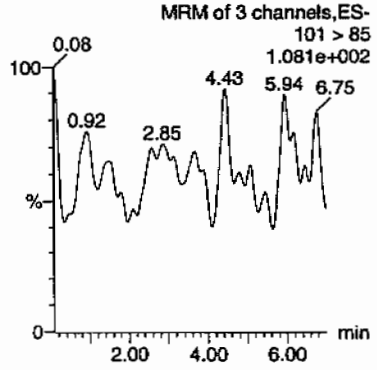
ırchlorate



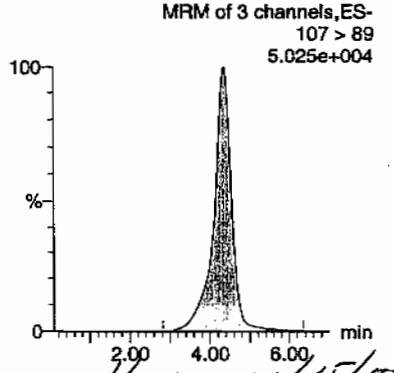
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/15/10

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B007	Perchlorate	99 > 83											0.00
B007	Perchlorate-101	101 > 85											
B007	Perchlorate-O(18)	107 > 89	4.35	25878.777	25878.777	bb			0.4797	95.95	-4.05	3560.3...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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e GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

st Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
inted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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ıte: 14-Jan-2010
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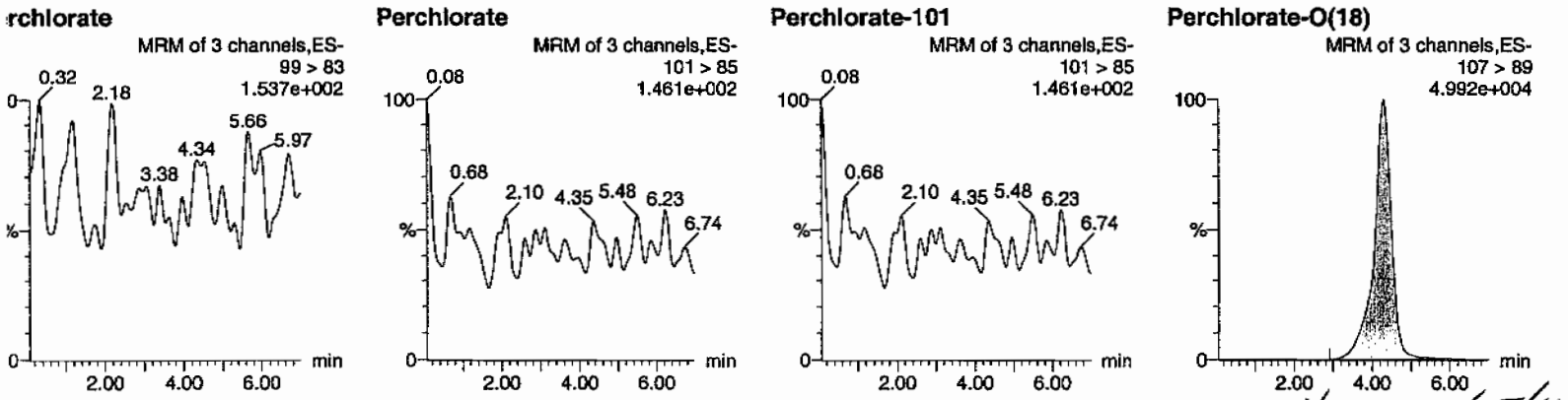
01-15-10



Hme 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3008	Perchlorate	99 > 83											0.00
3008	Perchlorate-101	101 > 85											
3008	Perchlorate-O(18)	107 > 89	4.30	25363.645	25363.645	bb			0.4702	94.04	-5.96	1463.8...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

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rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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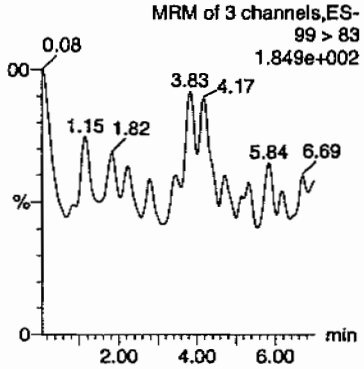
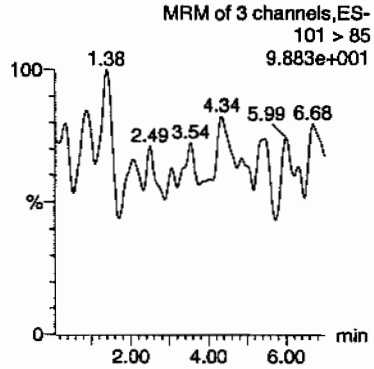
ial: 1:1,A

CW 01-15-10

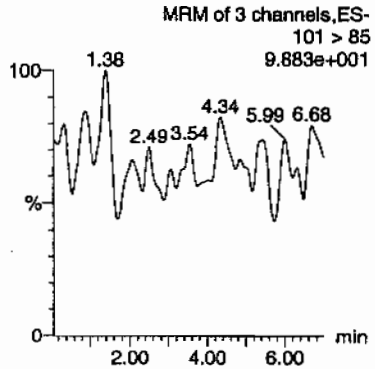
erchlorate



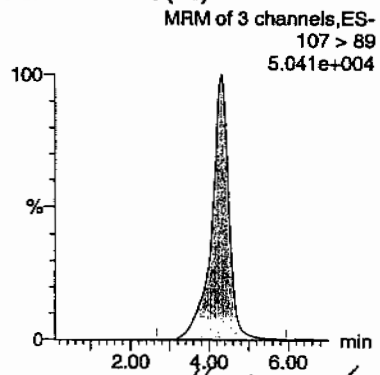
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/15/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB009	Perchlorate	99 > 83											0.00
PB009	Perchlorate-101	101 > 85											
PB009	Perchlorate-O(18)	107 > 89	4.30	25306.299	25306.299	bb			0.4691	93.83	-6.17	1387.8...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
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; 3170.7688	100
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; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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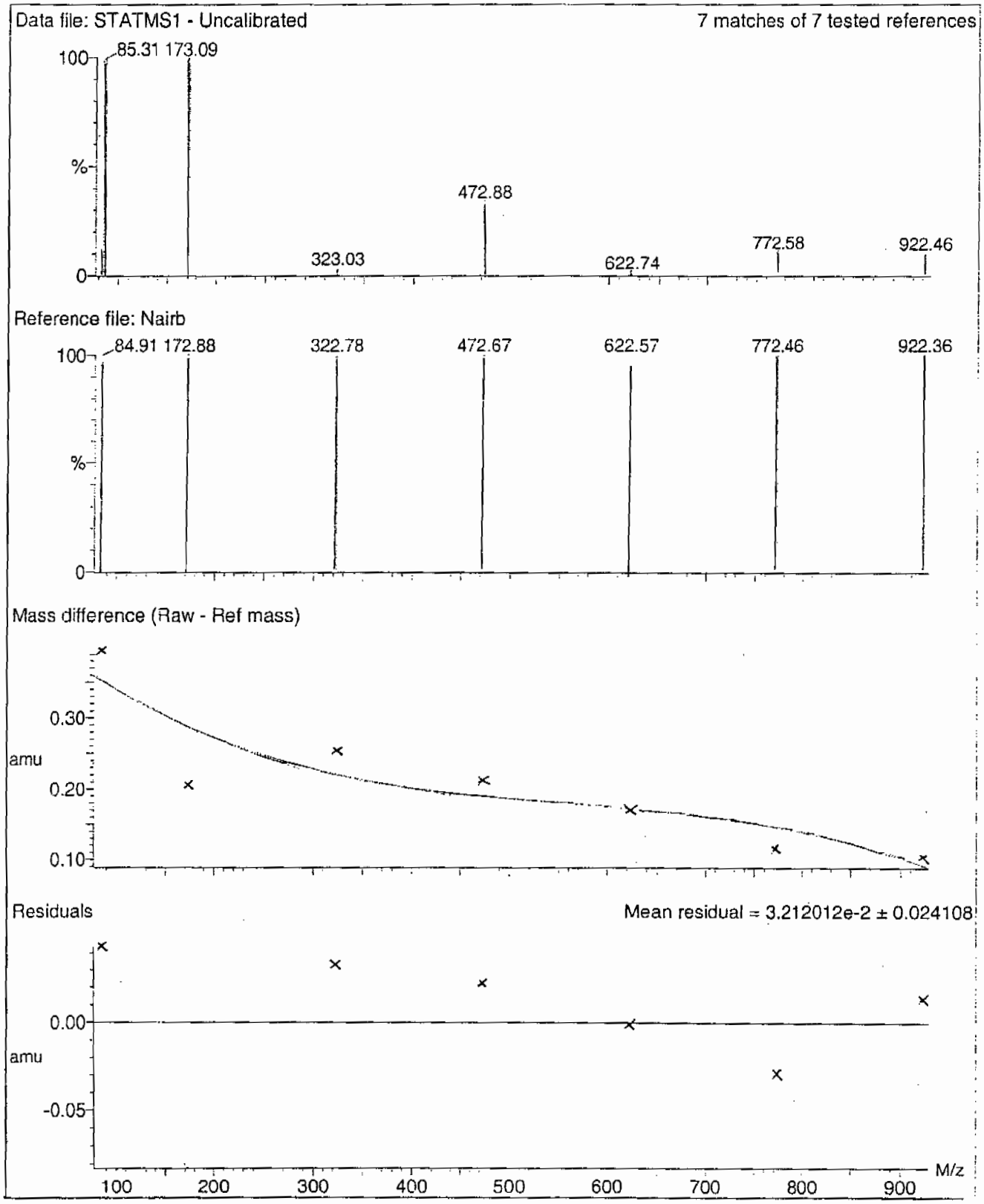
QUATRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: Tue Jan 08 12:19:12 2008

PALTS HIGHLIGHTED BY CWW 01-09-08



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS1 Scanning

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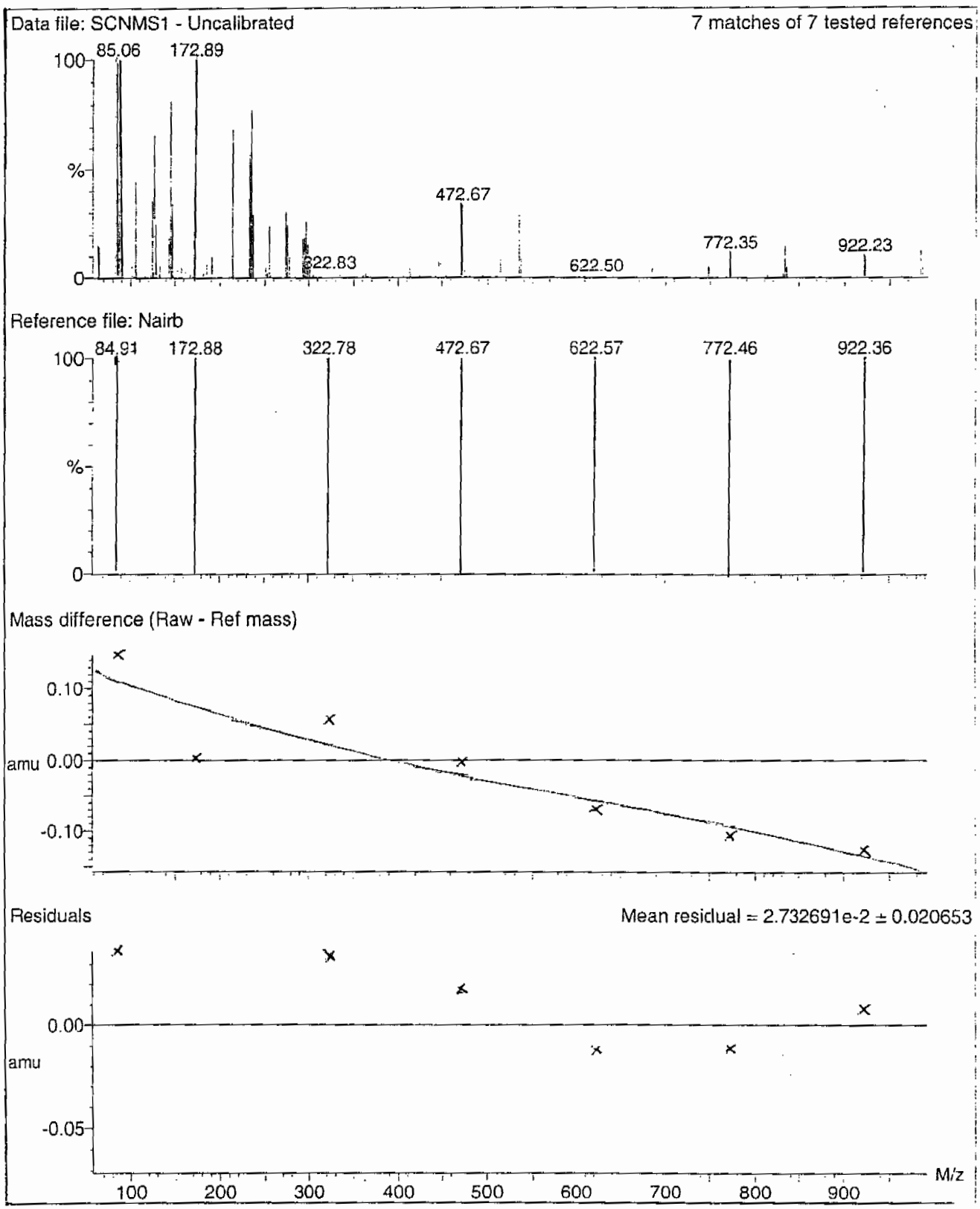

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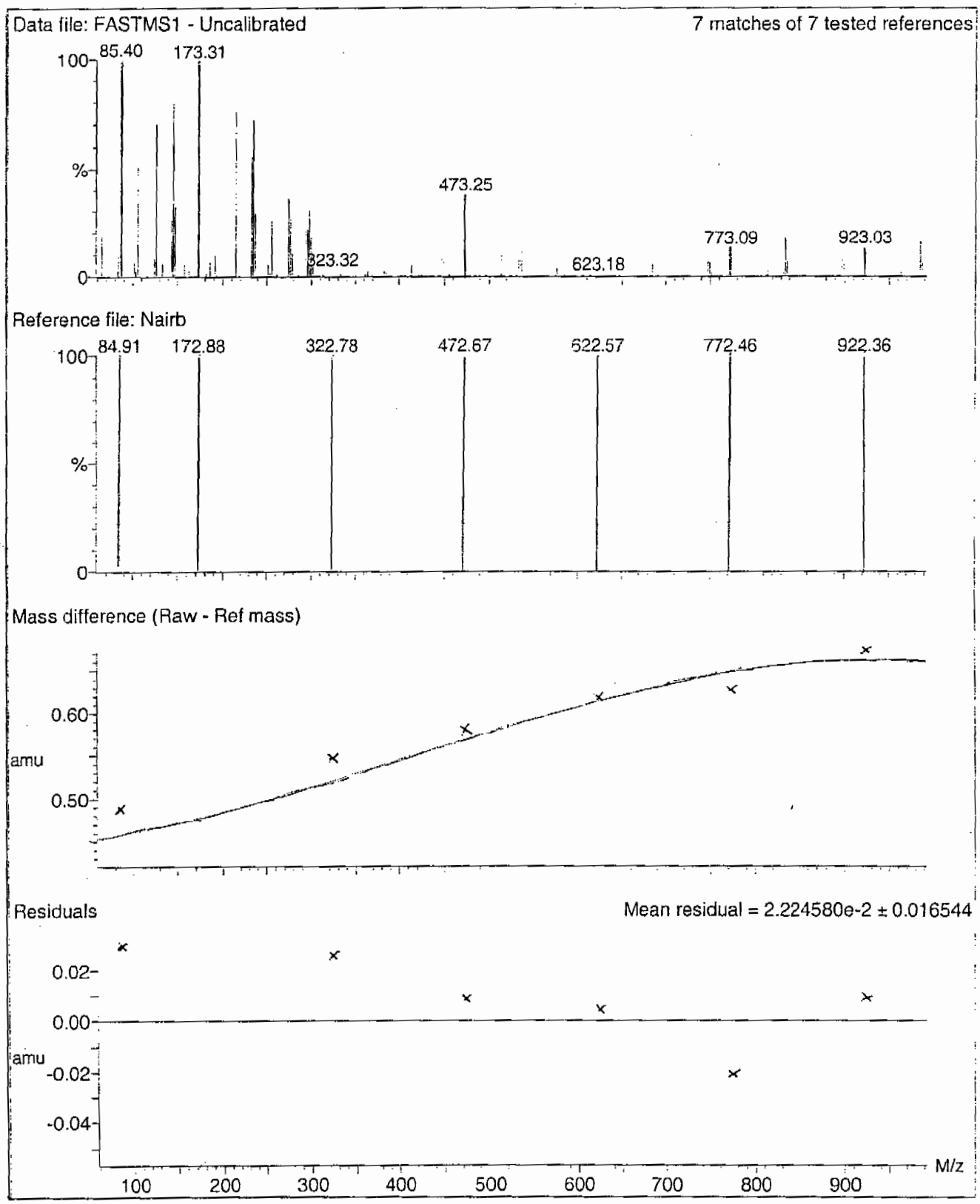
Calibration Report - MS1 Scan Speed Compensation

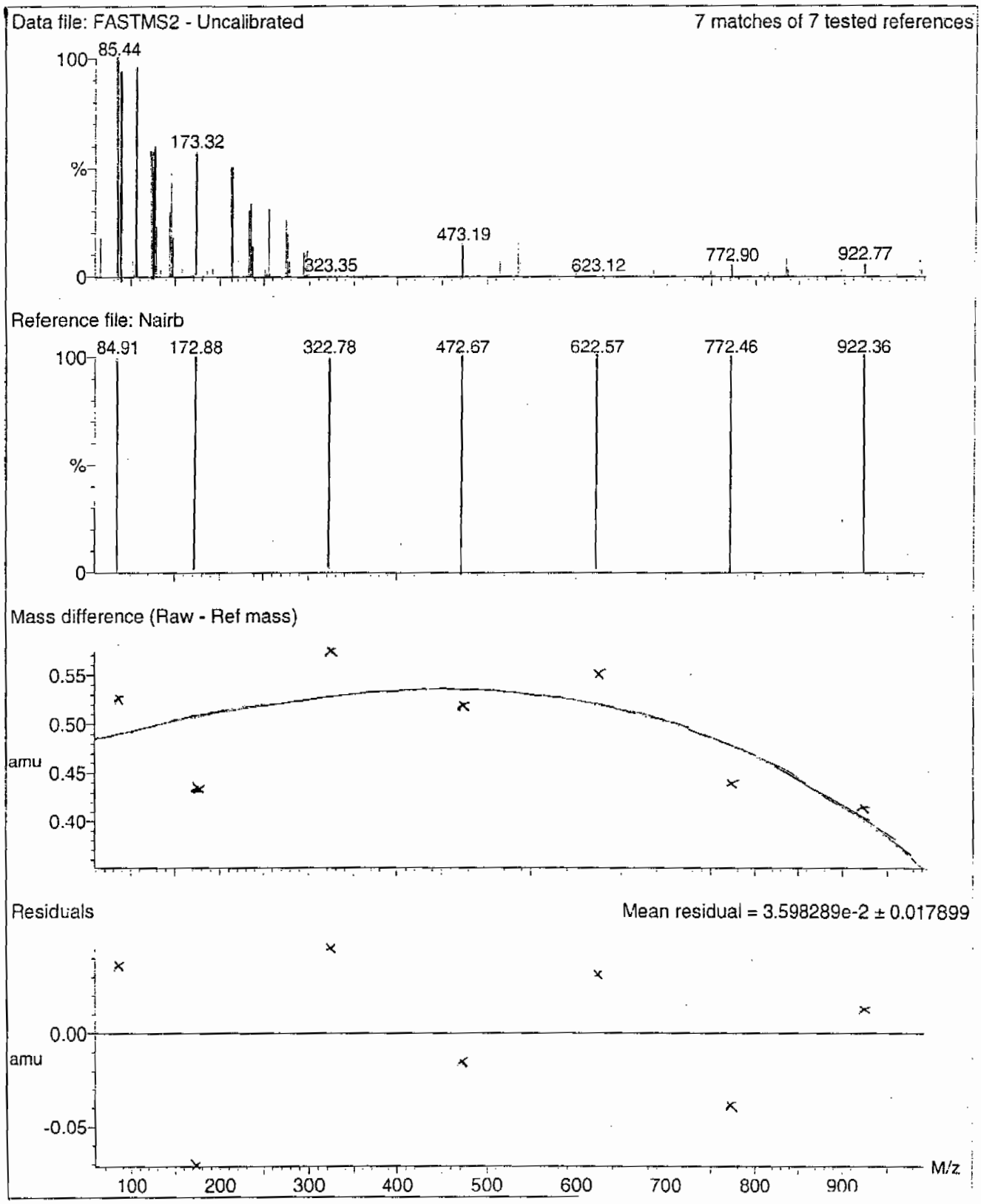
Printed: Tue Jan 08 12:21:04 2008



PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Scan Speed Compensation

Printed: Tue Jan 08 12:23:51 2008



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Calibration Report - MS2 Scanning

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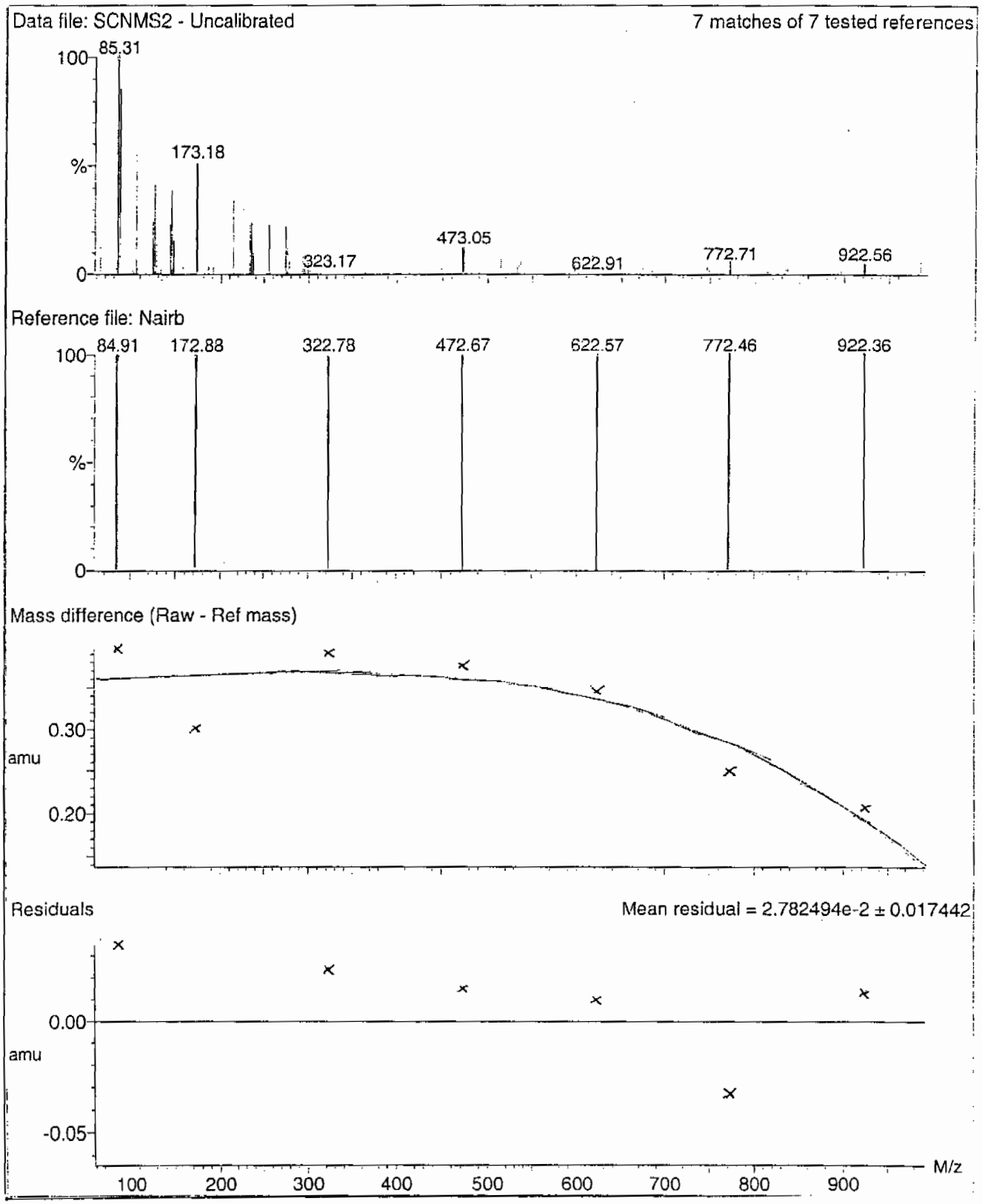

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Calibration Report - MS2 Static

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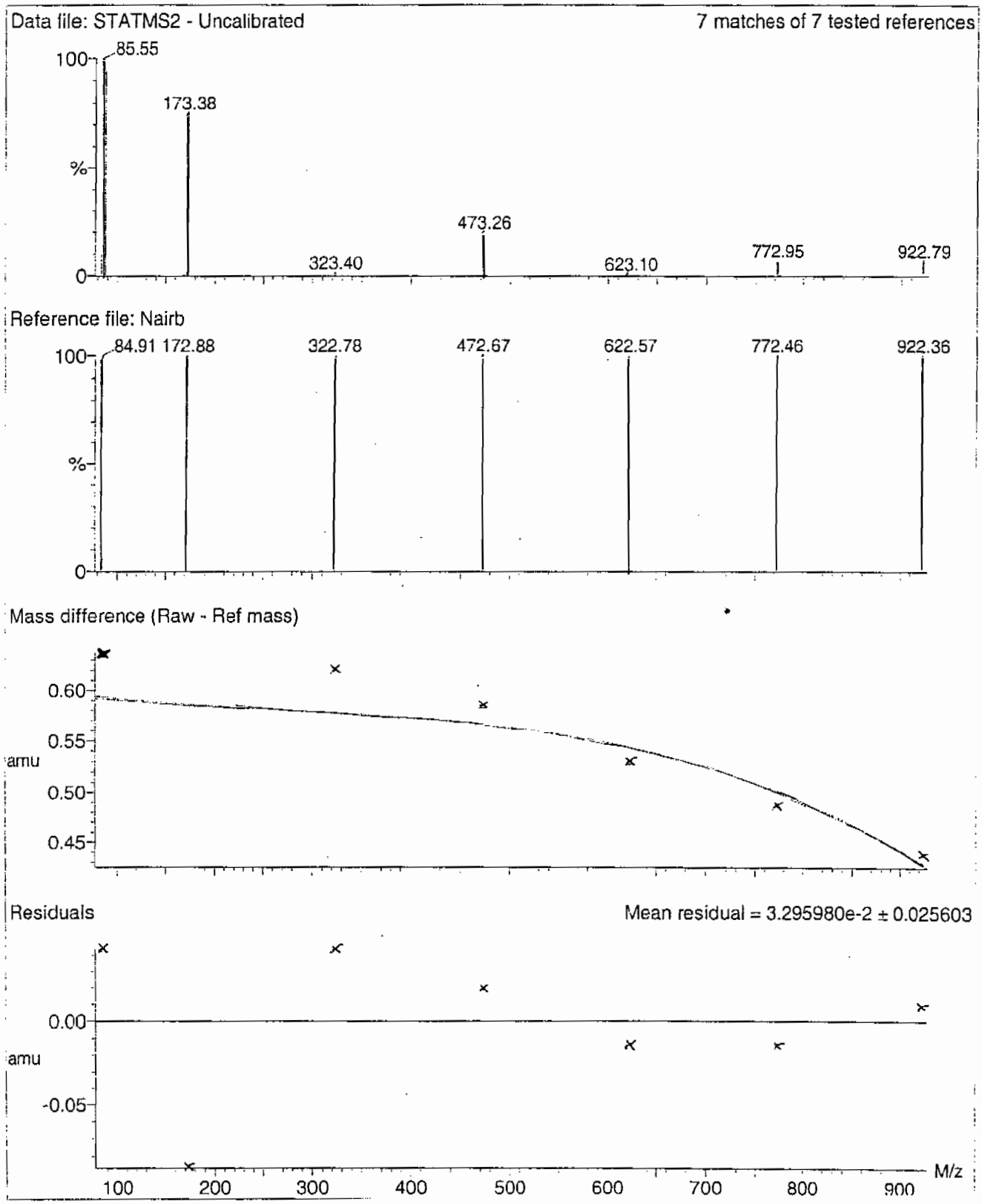
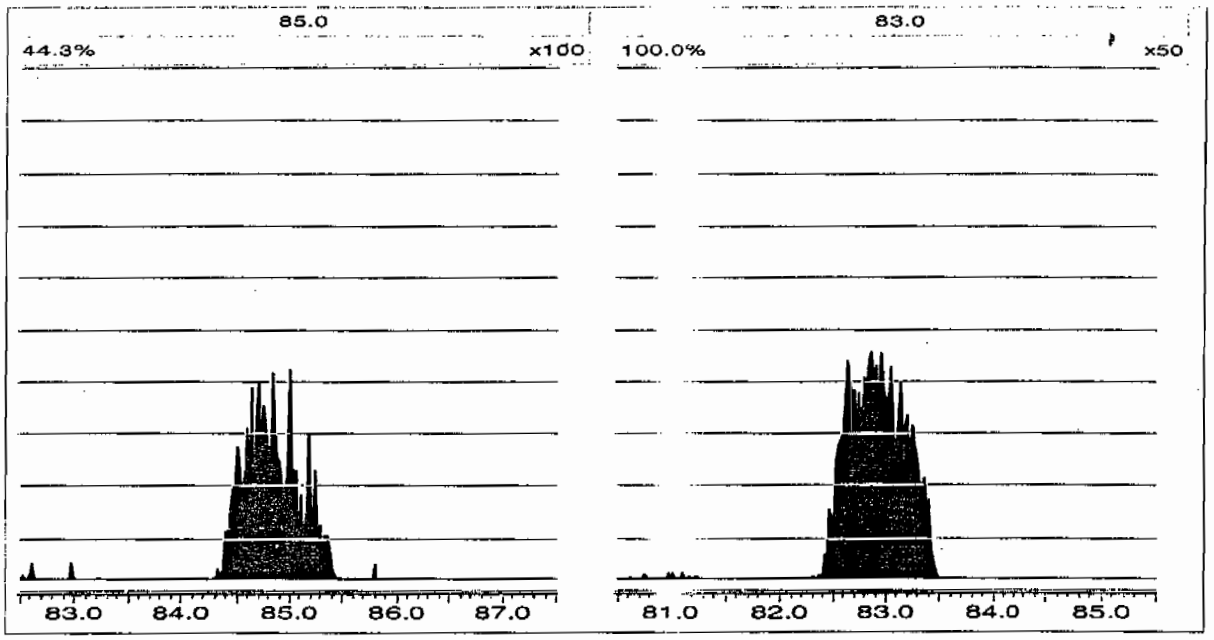


PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Thursday, January 14, 2010 10:32:26 Eastern Standard Time



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1161-2

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per0114006a**	**14-JAN-10**	**27456.1**				
Lower Area Limit			**13728.05**				
Upper Area Limit			**54912.2**				
1202011797	per0114026a	14-JAN-10 16:18	26278.3	4.32			
1202011798	per0114027a	14-JAN-10 16:28	27192.7	4.3	4.3276	1.006	
1202011801	per0114028a	14-JAN-10 16:38	27664	4.7	4.71258	1.003	
244228001	per0114046a	14-JAN-10 19:39	25529.8	4.34	4.35238	1.003	
1202011799	per0114047a	14-JAN-10 19:49	26735.7	4.34	4.35238	1.003	
1202011800	per0114048a	14-JAN-10 19:59	26255.1	4.34	4.35238	1.003	
244228002	per0114049a	14-JAN-10 20:09	26970.7	4.32	4.33987	1.005	
244228003	per0114050a	14-JAN-10 20:19	26793.5	4.33	4.35237	1.005	

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Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1161-2

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per0114006a**	**14-JAN-10**	**27456.1**				
Lower Area Limit			**13728.05**				
Upper Area Limit			**54912.2**				
244228004	per0114051a	14-JAN-10 20:29	26887.4	4.32	4.31508	.999	
244228005	per0114052a	14-JAN-10 20:40	26637.3	4.32	4.33993	1.005	
244228006	per0114053a	14-JAN-10 20:50	25624.1	4.3	4.33992	1.009	

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SAMPLE
DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7709

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228001

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.593	2.37	0.593	ug/kg	U	1	14-JAN-10 19:39	per0114046a
	Perchlorate Isotope Ratio						1	14-JAN-10 19:39	per0114046a
14797-73-0	Perchlorate-101	.593	2.37	0.593	ug/kg	U	1	14-JAN-10 19:39	per0114046a
	Perchlorate-O(18)			5.62	ug/kg		1	14-JAN-10 19:39	per0114046a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ıst Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
inted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

ame: per0114046a
ate: 14-Jan-2010
me: 19:39:43
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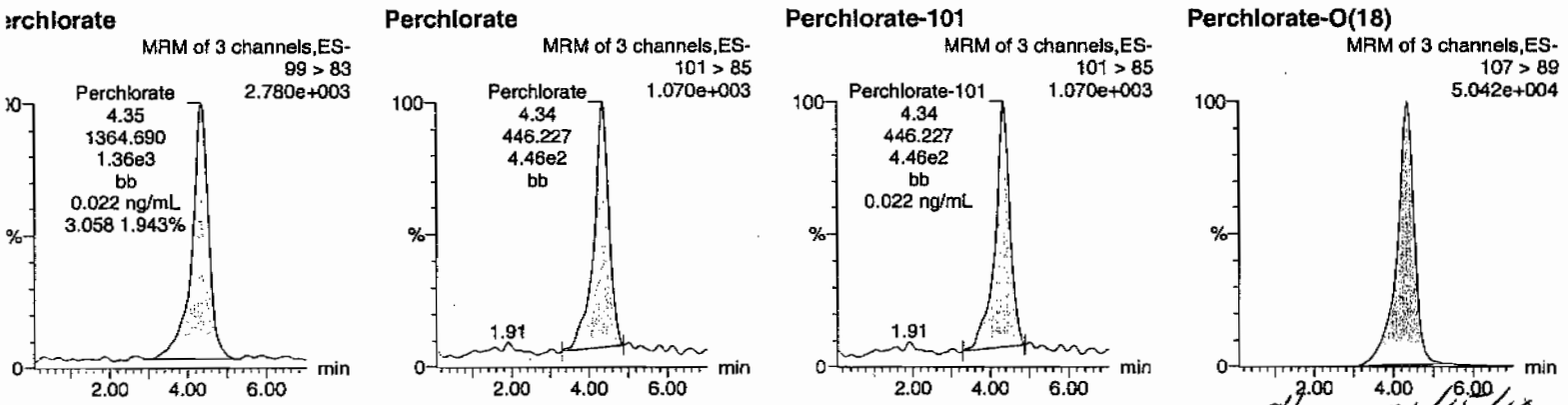
al: 1:6,C

|LANL|940129|SOL2D|1|RA

01-15-10



Hmm 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
4228001	Perchlorate	99 > 83	4.35	1364.690	1364.690	bb			0.0221			136.332	3.06
4228001	Perchlorate-101	101 > 85	4.34	446.227	446.227	bb			0.0223			32.985	
4228001	Perchlorate-O(18)	107 > 89	4.34	25529.834	25529.834	bb			0.4733	94.65	-5.35	3867.5...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7711

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228002

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.608	2.43	0.608	ug/kg	U	1	14-JAN-10 20:09	per0114049a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:09	per0114049a
14797-73-0	Perchlorate-101	.608	2.43	0.608	ug/kg	U	1	14-JAN-10 20:09	per0114049a
	Perchlorate-O(18)			6.08	ug/kg		1	14-JAN-10 20:09	per0114049a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4

ne GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ast Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

ame: per0114049a
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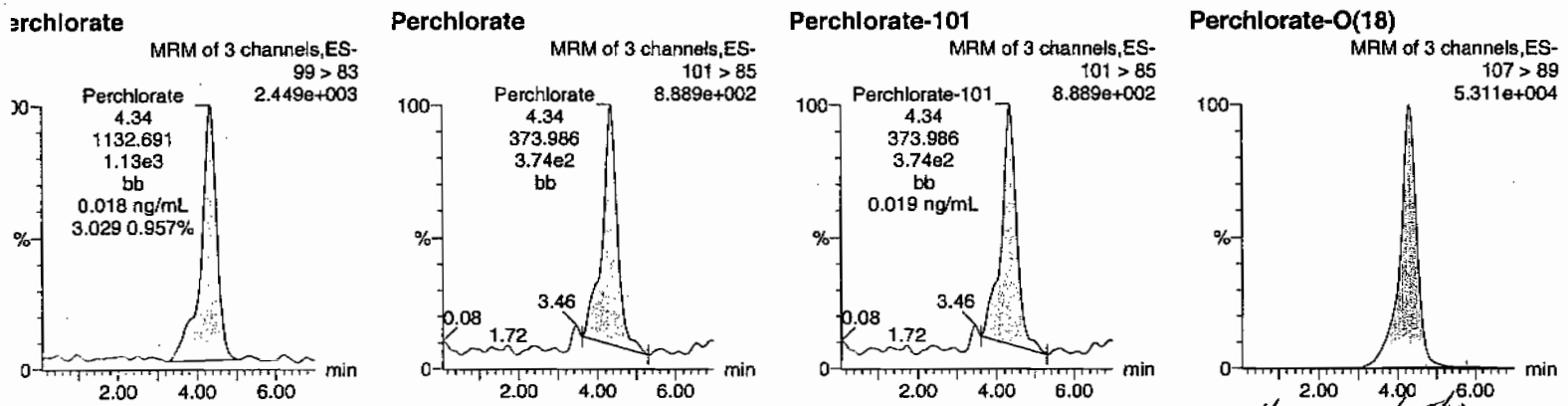
: 244228002
ial: 1:6,F

|LANL|940129|50120|1|RA

01-15-10



Hmw 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
4228002	Perchlorate	99 > 83	4.34	1132.691	1132.691	bb			0.0183			60.318	3.03
4228002	Perchlorate-101	101 > 85	4.34	373.986	373.986	bb			0.0187			71.323	
4228002	Perchlorate-O(18)	107 > 89	4.32	26970.672	26970.672	bb			0.5000	100.00	-0.00	2006.6...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7712

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228003

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 90

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.559	2.23	0.559	ug/kg	U	1	14-JAN-10 20:19	per0114050a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:19	per0114050a
14797-73-0	Perchlorate-101	.559	2.23	0.559	ug/kg	U	1	14-JAN-10 20:19	per0114050a
	Perchlorate-O(18)			5.55	ug/kg		1	14-JAN-10 20:19	per0114050a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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)uantify Sample Report MassLynx 4.0 SP4
'he GEL Group, LLC Analyst: Charlers W. Wilson

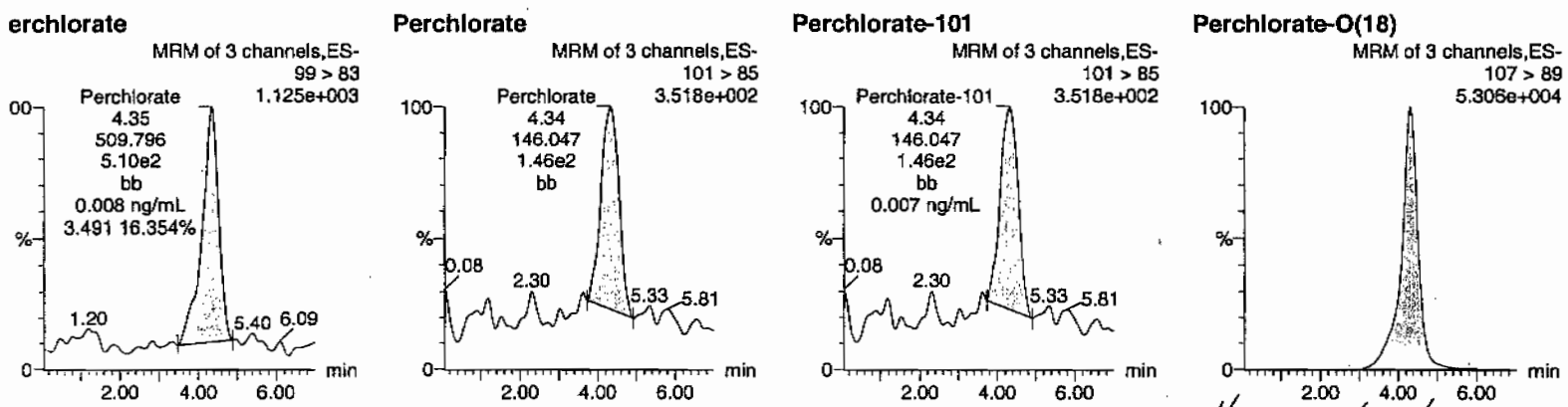
)ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ast Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
'rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

lame: per0114050a
)ate: 14-Jan-2010
ime: 20:19:54
): 244228003
'ial: 1:7,A

|LANL|940129|SOLID|1|

01-15-10



Hmw 01/15/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
14228003	Perchlorate	99 > 83	4.35	509.796	509.796	bb			0.0083			74.520	3.49
14228003	Perchlorate-101	101 > 85	4.34	146.047	146.047	bb			0.0073			25.780	
14228003	Perchlorate-O(18)	107 > 89	4.33	26793.525	26793.525	bb			0.4967	99.34	-0.66	1908.1...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7716

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228004

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 95.3

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.525	2.1	0.525	ug/kg	U	1	14-JAN-10 20:29	per0114051a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:29	per0114051a
14797-73-0	Perchlorate-101	.525	2.1	0.525	ug/kg	U	1	14-JAN-10 20:29	per0114051a
	Perchlorate-O(18)			5.23	ug/kg		1	14-JAN-10 20:29	per0114051a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

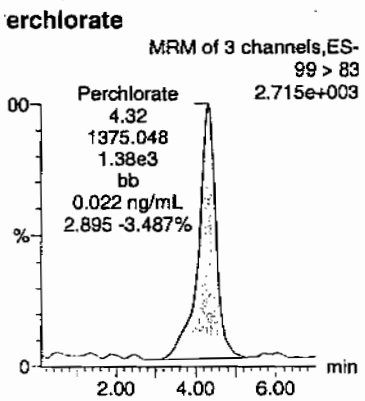
Dataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

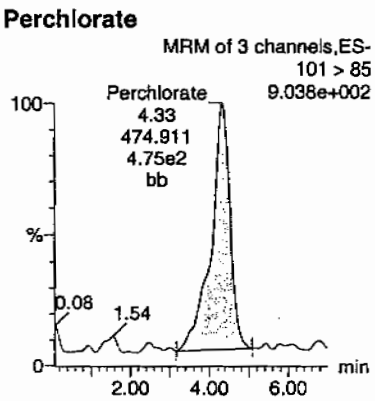
Last Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
Printed: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

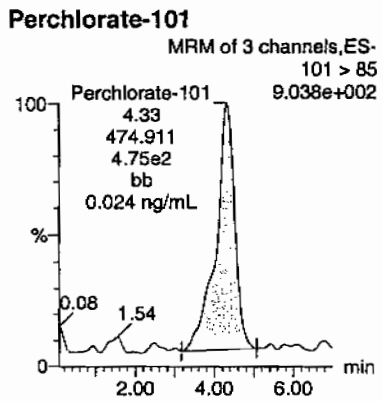
Name: per0114051a
Date: 14-Jan-2010
Time: 20:29:58
ID: 244228004
Vial: 1:7,B

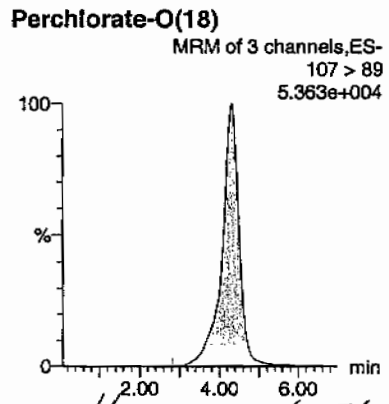
|LANL|940129|SOL20|1|RA

01-15-10









Hmm 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44228004	Perchlorate	99 > 83	4.32	1375.048	1375.048	bb			0.0223			119.246	2.90
44228004	Perchlorate-101	101 > 85	4.33	474.911	474.911	bb			0.0237			17.793	
44228004	Perchlorate-O(18)	107 > 89	4.32	26887.412	26887.412	bb			0.4984	99.69	-0.31	2029.1...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7718

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228005

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.575	2.3	0.575	ug/kg	U	1	14-JAN-10 20:40	per0114052a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:40	per0114052a
14797-73-0	Perchlorate-101	.575	2.3	0.575	ug/kg	U	1	14-JAN-10 20:40	per0114052a
	Perchlorate-O(18)			5.68	ug/kg		1	14-JAN-10 20:40	per0114052a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

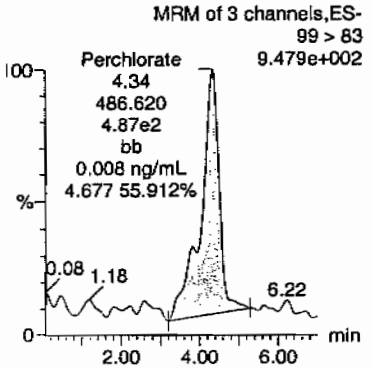
Last Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
Printed: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

Name: per0114052a
Date: 14-Jan-2010
Time: 20:40:02
ID: 244228005
Vial: 1:7,C

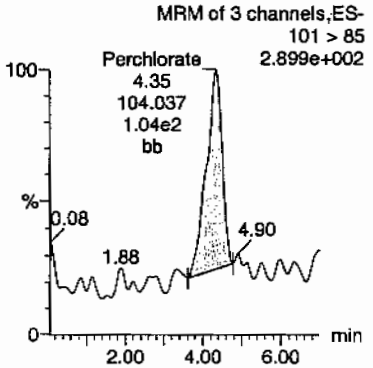
| LANL | 940129 | SOLID | 1 | RA

01-15-10

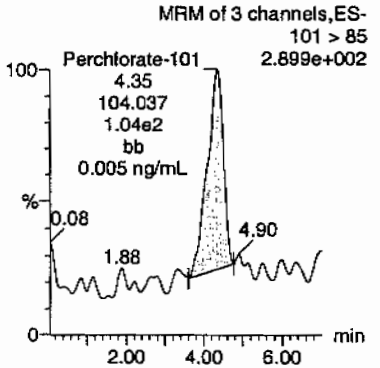
Perchlorate



Perchlorate



Perchlorate-101



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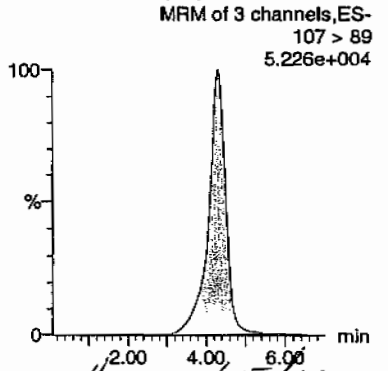

Hmw 01/15/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44228005	Perchlorate	99 > 83	4.34	486.620	486.620	bb			0.0079			103.259	4.68
44228005	Perchlorate-101	101 > 85	4.35	104.037	104.037	bb			0.0052			7.039	
44228005	Perchlorate-O(18)	107 > 89	4.32	26637.293	26637.293	bb			0.4938	98.76	-1.24	1610.1...	

OKAY
LA0500

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7713

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 244228006

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.676	2.71	0.676	ug/kg	U	1	14-JAN-10 20:50	per0114053a
	Perchlorate Isotope Ratio						1	14-JAN-10 20:50	per0114053a
14797-73-0	Perchlorate-101	.676	2.71	0.676	ug/kg	U	1	14-JAN-10 20:50	per0114053a
	Perchlorate-O(18)			6.43	ug/kg		1	14-JAN-10 20:50	per0114053a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

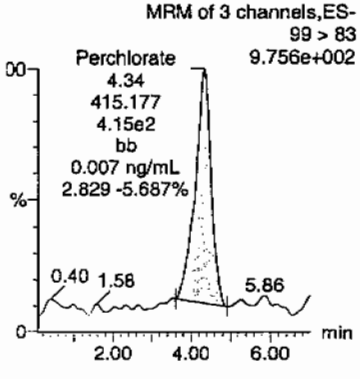
ast Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

ame: per0114053a
ate: 14-Jan-2010
ime: 20:50:06
): 244228006
ial: 1:7,D

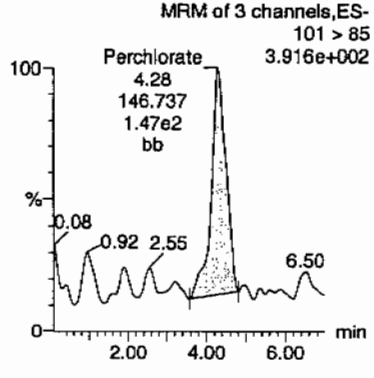
|LANL| 940129 | SOLID | 1 | RA

01-15-10

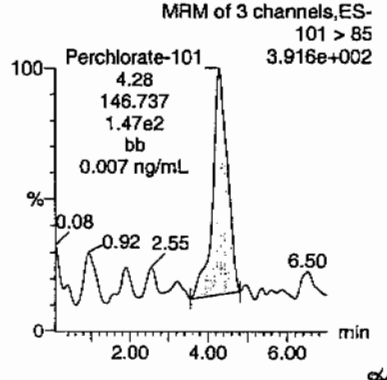
erchlorate



Perchlorate



Perchlorate-101



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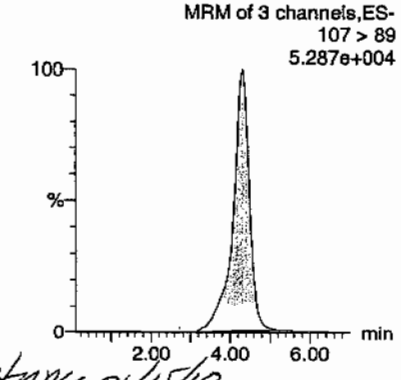

Hmm 01/15/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
14228006	Perchlorate	99 > 83	4.34	415.177	415.177	bb			0.0067			41.565	2.83
14228006	Perchlorate-101	101 > 85	4.28	146.737	146.737	bb			0.0073			43.428	
14228006	Perchlorate-O(18)	107 > 89	4.30	25624.145	25624.145	bb			0.4750	95.00	-5.00	1560.1...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1161-2

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 14-JAN-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 61773.18

Response Type: External Standard

Curve Type: RF

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Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1161-2

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 14-JAN-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 20035.48

Response Type: External Standard

Curve Type: RF

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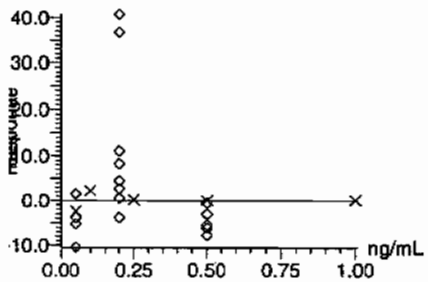
uantify Calibration Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

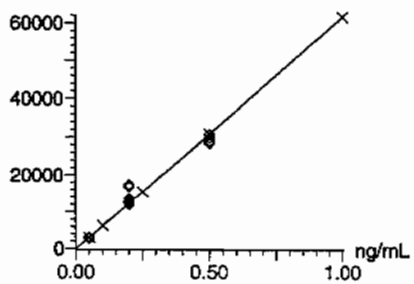
taset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

st Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
inted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per011410a.mdb 15 Jan 2010 07:52:49
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per011410a.cdb 15 Jan 2010 07:53:05

ompound name: Perchlorate
esponse Factor: 61773.2
RF SD: 1017.11, % Relative SD: 1.64652
esponse type: External Std, Area
urve type: RF





mw
01-15-10

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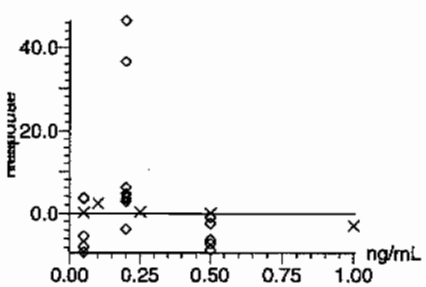
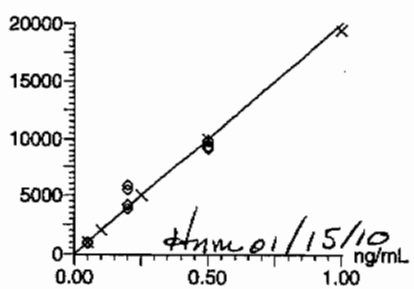
esponse type: External Std, Area
urve type: RF





Hnm 01/15/10

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

uantify Calibration Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ast Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

ompound name: Perchlorate-O(18)
esponse Factor: 53943.5
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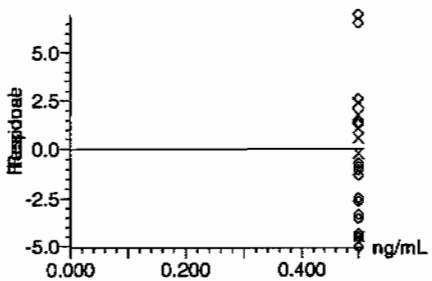
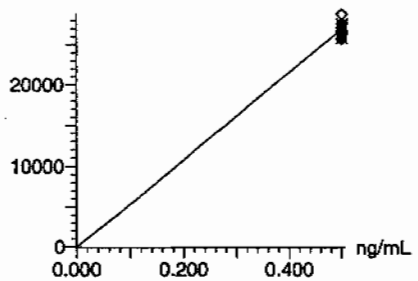
esponse type: External Std, Area
urve type: RF





EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1161–2

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.47	14–JAN–10 13:27	per0114009a
Perchlorate Isotope Ratio		3.09		14–JAN–10 13:27	per0114009a
Perchlorate–101	.5	.5	99.1	14–JAN–10 13:27	per0114009a

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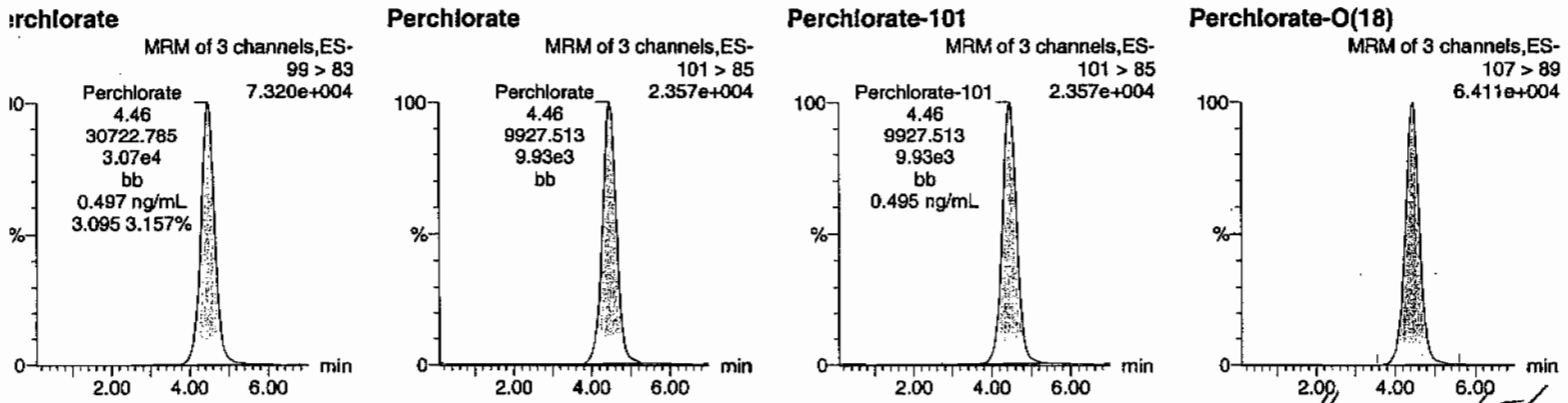
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

.st Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
inted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

ıme: per0114009a
ıte: 14-Jan-2010
me: 13:27:42
: WCL100104-06ICV
al: 1:2,A

Pass
01-15-10



Hmm 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06ICV	Perchlorate	99 > 83	4.46	30722.785	30722.785	bb			0.4973	99.47	-0.53	7933.4...	3.09
CL100104-06ICV	Perchlorate-101	101 > 85	4.46	9927.513	9927.513	bb			0.4955	99.10	-0.90	1335.6...	
CL100104-06ICV	Perchlorate-O(18)	107 > 89	4.44	26691.609	26691.609	bb			0.4948	98.96	-1.04	1434.0...	

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Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161-2

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	96.9	14-JAN-10 14:58	per0114018a
Perchlorate Isotope Ratio		3.06		14-JAN-10 14:58	per0114018a
Perchlorate-101	.5	.49	97.63	14-JAN-10 14:58	per0114018a
Perchlorate	.5	.47	93.83	14-JAN-10 17:08	per0114031a
Perchlorate Isotope Ratio		3.09		14-JAN-10 17:08	per0114031a
Perchlorate-101	.5	.47	93.76	14-JAN-10 17:08	per0114031a
Perchlorate	.5	.47	94.52	14-JAN-10 19:09	per0114043a
Perchlorate Isotope Ratio		3.19		14-JAN-10 19:09	per0114043a
Perchlorate-101	.5	.46	91.36	14-JAN-10 19:09	per0114043a
Perchlorate	.5	.46	92.2	14-JAN-10 21:20	per0114056a
Perchlorate Isotope Ratio		3.06		14-JAN-10 21:20	per0114056a
Perchlorate-101	.5	.46	92.9	14-JAN-10 21:20	per0114056a

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

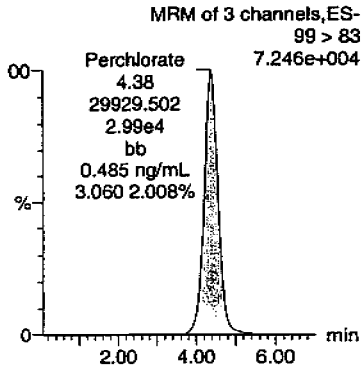
ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ast Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

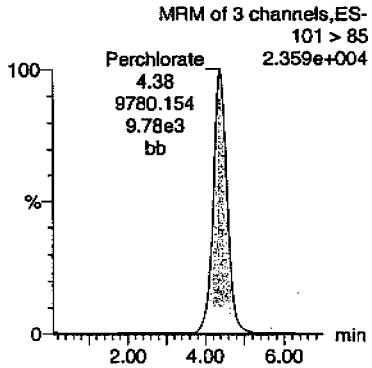
ame: per0114018a
ate: 14-Jan-2010
ime: 14:58:13
): WCL100104-06CCV
ial: 1:2,A

Pass
and
01-15-10

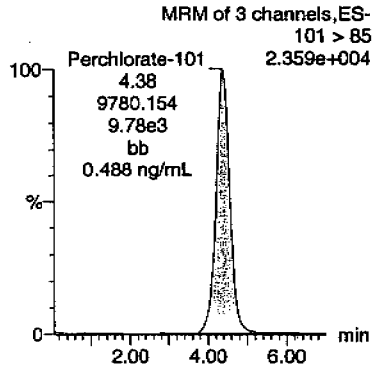
erchlorate



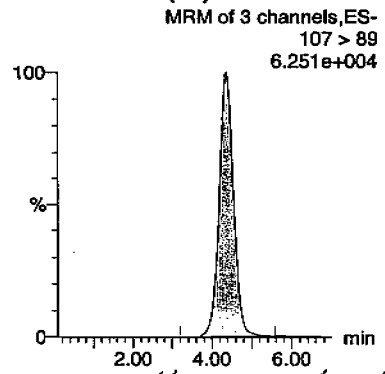
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/15/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-06CCV	Perchlorate	99 > 83	4.38	29929.502	29929.502	bb			0.4845	96.90	-3.10	2092.1...	3.06
/CL100104-06CCV	Perchlorate-101	101 > 85	4.38	9780.154	9780.154	bb			0.4881	97.63	-2.37	4252.2...	
/CL100104-06CCV	Perchlorate-O(18)	107 > 89	4.36	26014.844	26014.844	bb			0.4823	96.45	-3.55	3850.4...	

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

ıataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ıst Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
ınted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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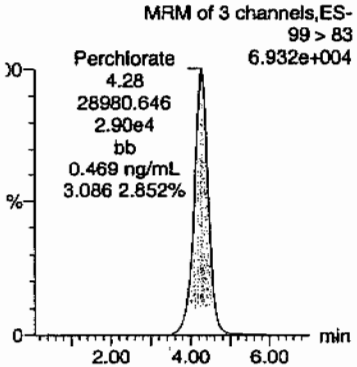
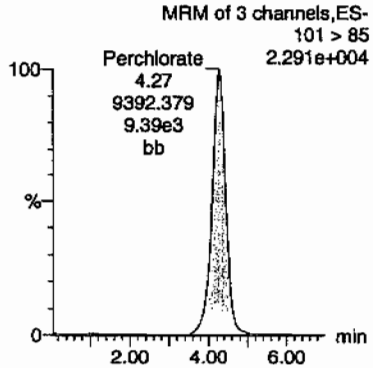
ate: 14-Jan-2010
me: 17:08:42
: WCL100104-06CCV
al: 1:2,A

Pass
01-15-10

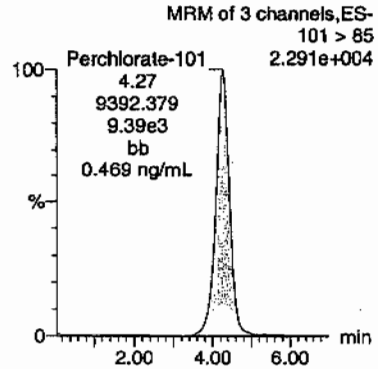
erchlorate



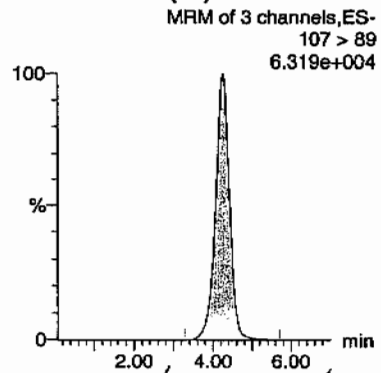
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100104-06CCV	Perchlorate	99 > 83	4.28	28980.646	28980.646	bb			0.4691	93.83	-6.17	2926.1...	3.09
CL100104-06CCV	Perchlorate-101	101 > 85	4.27	9392.379	9392.379	bb			0.4688	93.76	-6.24	1878.1...	
CL100104-06CCV	Perchlorate-O(18)	107 > 89	4.25	26075.045	26075.045	bb			0.4834	96.68	-3.32	5377.2...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

Last Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
Printed: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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Date: 14-Jan-2010
Time: 19:09:36
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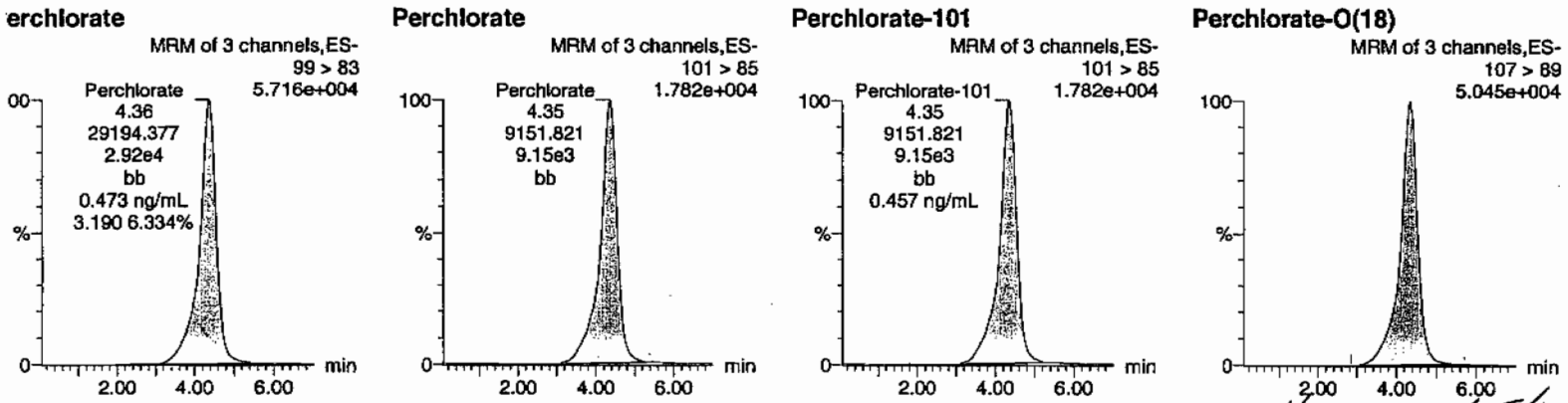
Vial: 1:2,A

CWW
01-15-10



HMM 01/15/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-06CCV	Perchlorate	99 > 83	4.36	29194.377	29194.377	bb			0.4726	94.52	-5.48	1537.3...	3.19
/CL100104-06CCV	Perchlorate-101	101 > 85	4.35	9151.821	9151.821	bb			0.4568	91.36	-8.64	1154.8...	
/CL100104-06CCV	Perchlorate-O(18)	107 > 89	4.34	25742.227	25742.227	bb			0.4772	95.44	-4.56	1360.6...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

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rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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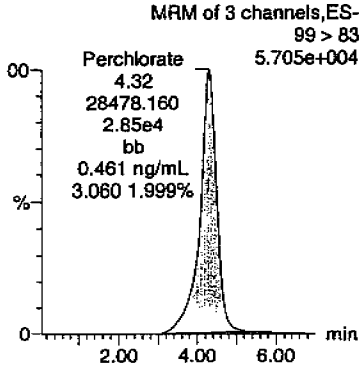
ate: 14-Jan-2010
ime: 21:20:39
): WCL100104-06CCV
ial: 1:2,A

Pass
ow
01-15-10

erchlorate



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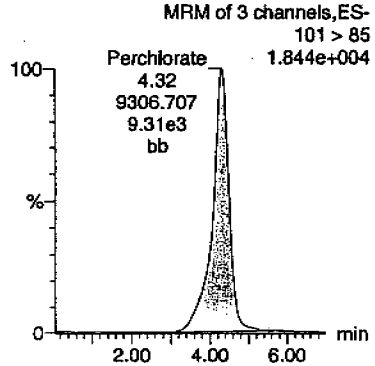
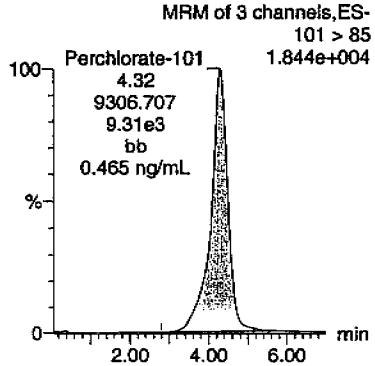
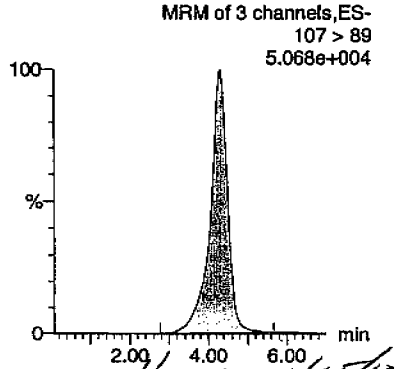


Perchlorate-101



Perchlorate-O(18)



Hmm 01/15/10

):	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-06CCV	Perchlorate	99 > 83	4.32	28478.160	28478.160	bb			0.4610	92.20	-7.80	882.741	3.06
/CL100104-06CCV	Perchlorate-101	101 > 85	4.32	9306.707	9306.707	bb			0.4645	92.90	-7.10	385.768	
/CL100104-06CCV	Perchlorate-O(18)	107 > 89	4.30	25795.416	25795.416	bb			0.4782	95.64	-4.36	3185.1...	

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1161–2

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	96.16	14–JAN–10 13:47	per0114011a
Perchlorate Isotope Ratio		2.87		14–JAN–10 13:47	per0114011a
Perchlorate–101	.05	.05	103.46	14–JAN–10 13:47	per0114011a
Perchlorate	.05	.05	101.41	14–JAN–10 15:18	per0114020a
Perchlorate Isotope Ratio		3.02		14–JAN–10 15:18	per0114020a
Perchlorate–101	.05	.05	103.66	14–JAN–10 15:18	per0114020a
Perchlorate	.05	.04	89.58	14–JAN–10 17:29	per0114033a
Perchlorate Isotope Ratio		3.04		14–JAN–10 17:29	per0114033a
Perchlorate–101	.05	.05	90.88	14–JAN–10 17:29	per0114033a
Perchlorate	.05	.05	101.57	14–JAN–10 19:29	per0114045a
Perchlorate Isotope Ratio		3.4		14–JAN–10 19:29	per0114045a

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Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1161-2

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	92.18	14-JAN-10 19:29	per0114045a
Perchlorate	.05	.05	94.82	14-JAN-10 21:41	per0114058a
Perchlorate Isotope Ratio		3.09		14-JAN-10 21:41	per0114058a
Perchlorate-101	.05	.05	94.63	14-JAN-10 21:41	per0114058a

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PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

luantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

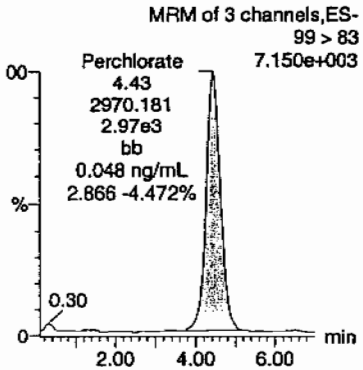
ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ast Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

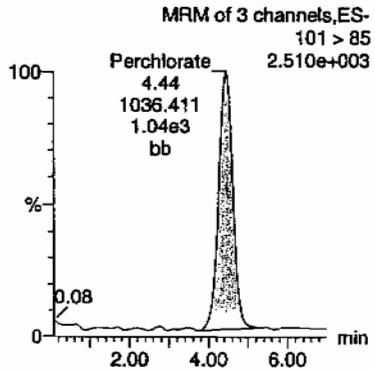
lame: per0114011a
late: 14-Jan-2010
ime: 13:47:46
): WCL100104-07CRI
ial: 1:2,B

Pass
aw
01-15-10

erchlorate



Perchlorate



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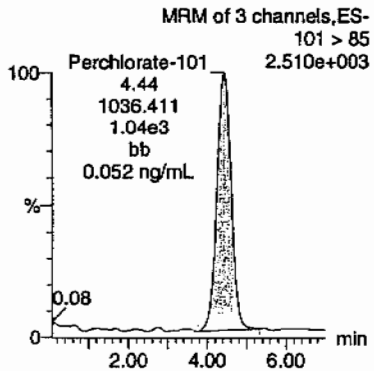
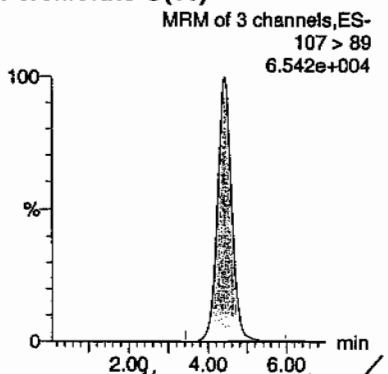


Perchlorate-O(18)



Hmm 01/15/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-07CRI	Perchlorate	99 > 83	4.43	2970.181	2970.181	bb			0.0481	96.16	-3.84	337.495	2.87
/CL100104-07CRI	Perchlorate-101	101 > 85	4.44	1036.411	1036.411	bb			0.0517	103.46	3.46	410.631	
/CL100104-07CRI	Perchlorate-O(18)	107 > 89	4.41	27352.369	27352.369	bb			0.5071	101.41	1.41	2099.5...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

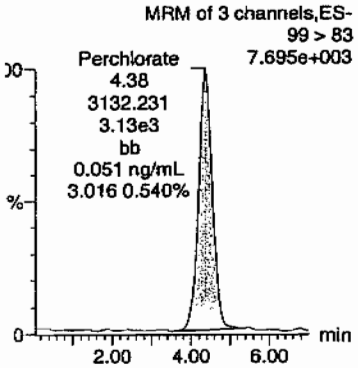
ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ıst Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
inted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

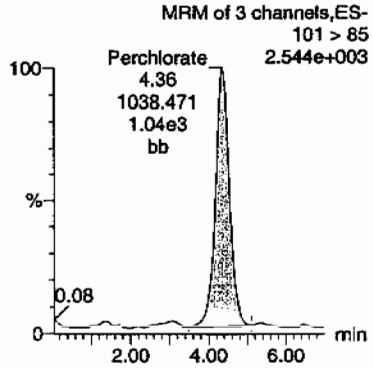
ame: per0114020a
ate: 14-Jan-2010
me: 15:18:17
: WCL100104-07CRI
al: 1:2,B

Pass
aw
01-15-10

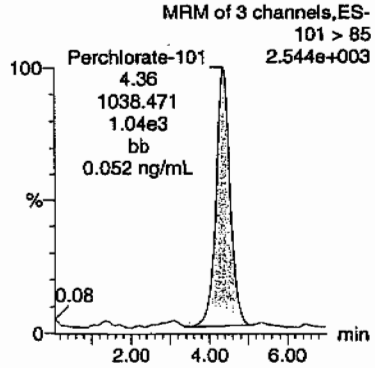
erchlorate



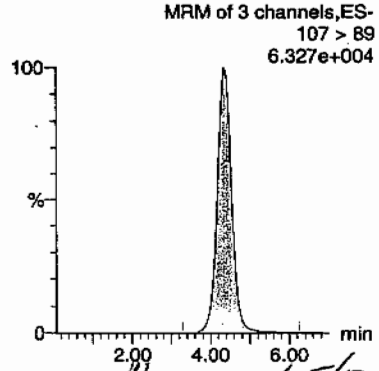
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 01/15/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100104-07CRI	Perchlorate	99 > 83	4.38	3132.231	3132.231	bb			0.0507	101.41	1.41	663.473	3.02
'CL100104-07CRI	Perchlorate-101	101 > 85	4.36	1038.471	1038.471	bb			0.0518	103.66	3.66	192.575	
'CL100104-07CRI	Perchlorate-O(18)	107 > 89	4.35	26616.289	26616.289	bb			0.4934	98.68	-1.32	5978.8...	

uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ast Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

ame: per0114033a
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ime: 17:29:06
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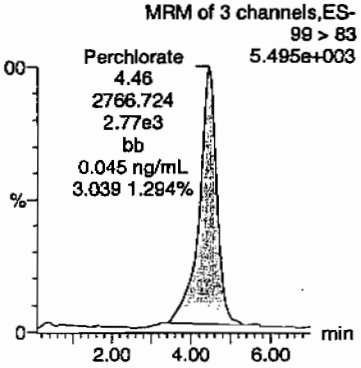
ial: 1:2,B

Pass
aw
01-15-10

erchlorate



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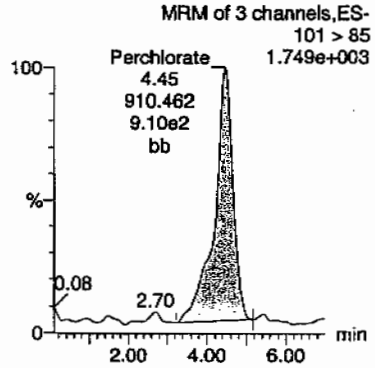
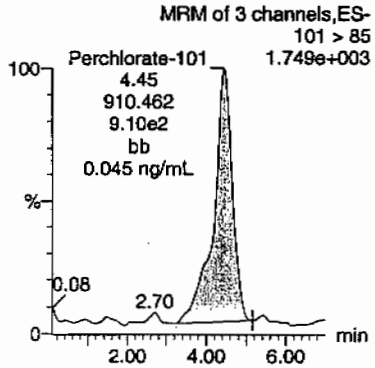
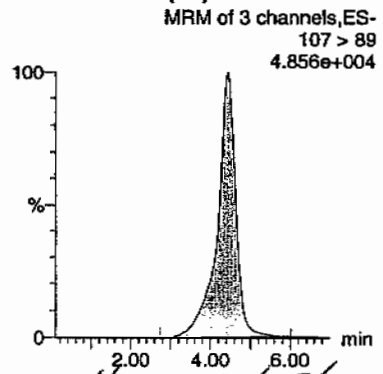


Perchlorate-101



Perchlorate-O(18)



Hmm 01/15/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-07CRI	Perchlorate	99 > 83	4.46	2766.724	2766.724	bb			0.0448	89.58	-10.42	147.450	3.04
/CL100104-07CRI	Perchlorate-101	101 > 85	4.45	910.462	910.462	bb			0.0454	90.88	-9.12	46.735	
/CL100104-07CRI	Perchlorate-O(18)	107 > 89	4.43	25756.949	25756.949	bb			0.4775	95.50	-4.50	3802.0...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

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uantify Sample Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ast Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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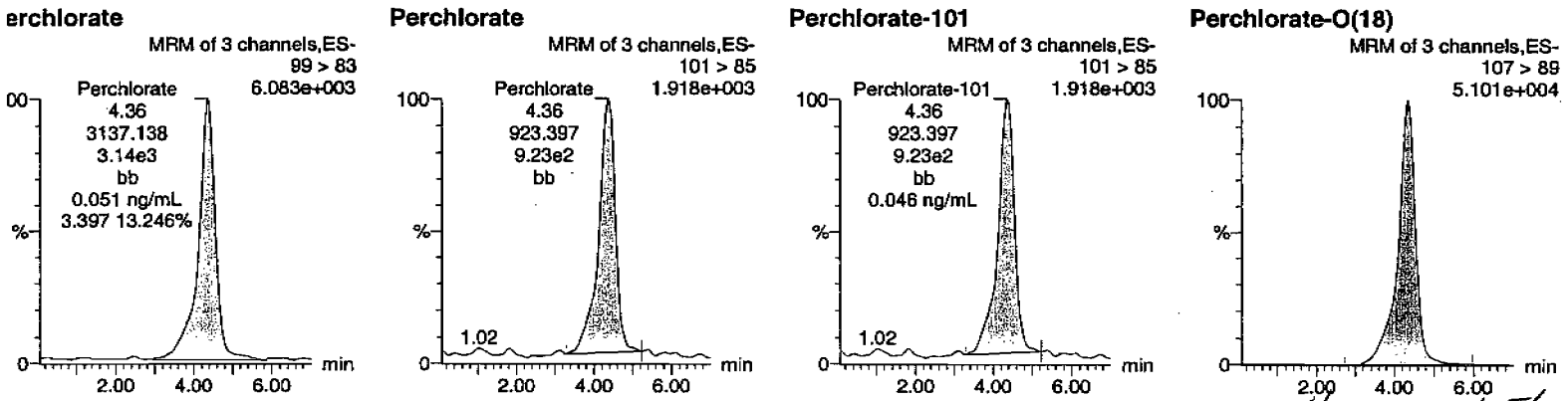
ial: 1:2,B

Pass
AW
01-15-10



HMM 01/15/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100104-07CRI	Perchlorate	99 > 83	4.36	3137.138	3137.138	bb			0.0508	101.57	1.57	177.070	3.40
/CL100104-07CRI	Perchlorate-101	101 > 85	4.36	923.397	923.397	bb			0.0461	92.18	-7.82	181.224	
/CL100104-07CRI	Perchlorate-O(18)	107 > 89	4.34	26303.965	26303.965	bb			0.4876	97.52	-2.48	1415.2...	

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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

Last Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
Printed: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

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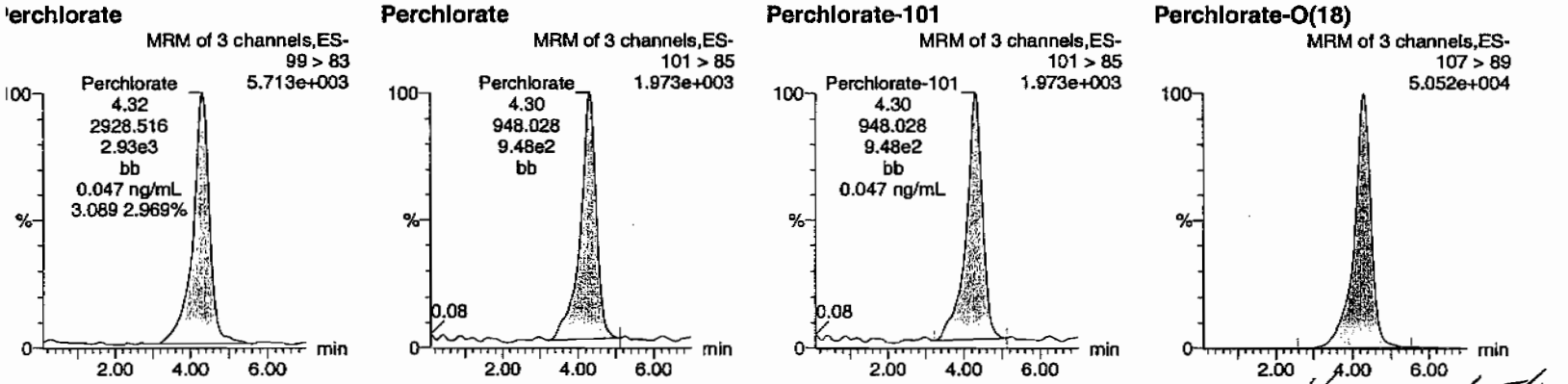
Time: 21:41:14
ID: WCL100104-07CRI
Vial: 1:2,B

Pass
ag
01-15-10



HMK 01/15/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100104-07CRI	Perchlorate	99 > 83	4.32	2928.516	2928.516	bb			0.0474	94.82	-5.18	300.403	3.09
WCL100104-07CRI	Perchlorate-101	101 > 85	4.30	948.028	948.028	bb			0.0473	94.63	-5.37	111.775	
WCL100104-07CRI	Perchlorate-O(18)	107 > 89	4.30	25609.037	25609.037	bb			0.4747	94.95	-5.05	621.660	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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QUALITY CONTROL

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
MB

Date Received: 12-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 1202011797

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	14-JAN-10 16:18	per0114026a
	Perchlorate Isotope Ratio						1	14-JAN-10 16:18	per0114026a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	14-JAN-10 16:18	per0114026a
	Perchlorate-O(18)			4.87	ug/kg		1	14-JAN-10 16:18	per0114026a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
ie GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

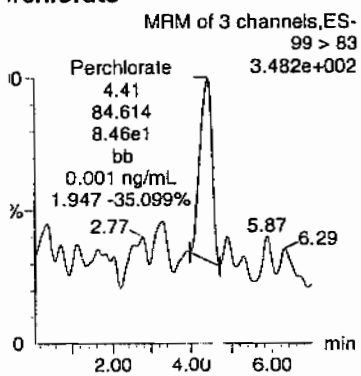
ist Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
inted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

ame: per0114026a
ate: 14-Jan-2010
me: 16:18:31
: 1202011797
al: 1:4,A

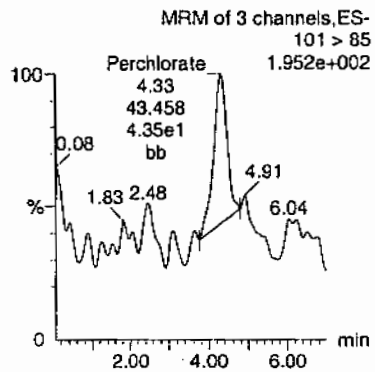
|LANL|940129|50020|MB|1|RA

CWW 01-15-10

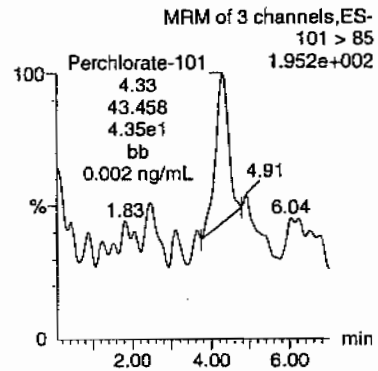
rchlorate



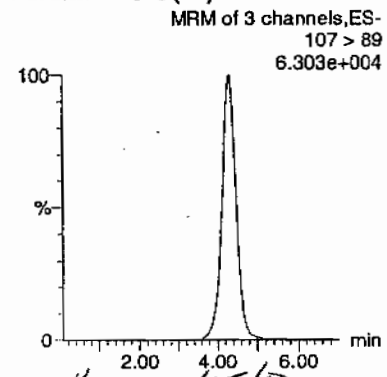
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio	
02011797	Perchlorate	99 > 83	4.41	84.614	84.614	bb			0.0014			13.209	1.95	OKAY
02011797	Perchlorate-101	101 > 85	4.33	43.458	43.458	bb			0.0022			15.496		<0.0500
02011797	Perchlorate-O(18)	107 > 89	4.32	26278.291	26278.291	bb			0.4871	97.43	-2.57	3363.6...		

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 12–JAN–10

GEL Job No (SDG): 10–1161–2

GEL Sample ID: 1202011798

Date Filtered: 12–JAN–10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797–73–0	Perchlorate	.5	2	2.01	ug/kg		1	14–JAN–10 16:28	per0114027a
	Perchlorate Isotope Ratio			3.01			1	14–JAN–10 16:28	per0114027a
14797–73–0	Perchlorate–101	.5	2	2.06	ug/kg		1	14–JAN–10 16:28	per0114027a
	Perchlorate–O(18)			5.04	ug/kg		1	14–JAN–10 16:28	per0114027a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate–101 peak area. The Perchlorate–101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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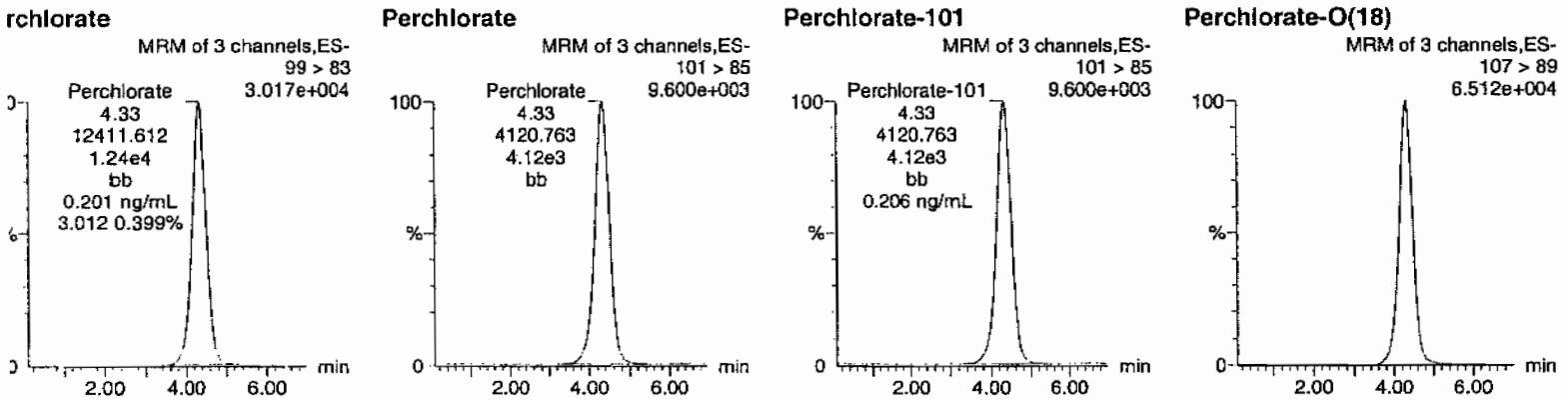
ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

.taset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

st Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
nted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

me: per0114027a
te: 14-Jan-2010
ne: 16:28:34
1202011798 |LANC|940129|SOL20|LCS|1|RA
ıl: 1:4,B

WJ 01-15-10



	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
)2011798	Perchlorate	99 > 83	4.33	12411.612	12411.612	bb			0.2009	100.46	0.46	425.116	3.01
)2011798	Perchlorate-101	101 > 85	4.33	4120.763	4120.763	bb			0.2057	102.84	2.84	336.476	
)2011798	Perchlorate-O(18)	107 > 89	4.30	27192.725	27192.725	bb			0.5041	100.82	0.82	5675.7...	

$\frac{12411.612}{61773.2} = 0.2009$

HMC 01/15/10

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7709MS

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 1202011799

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.593	2.37	2.64	ug/kg		1	14-JAN-10 19:49	per0114047a
	Perchlorate Isotope Ratio			3.23			1	14-JAN-10 19:49	per0114047a
14797-73-0	Perchlorate-101	.593	2.37	2.52	ug/kg		1	14-JAN-10 19:49	per0114047a
	Perchlorate-O(18)			5.88	ug/kg		1	14-JAN-10 19:49	per0114047a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

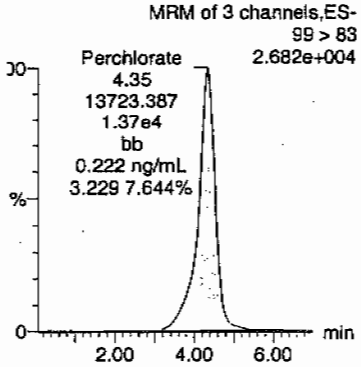
ıst Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

ame: per0114047a
ate: 14-Jan-2010
me: 19:49:46
): 1202011799
ial: 1:6,D

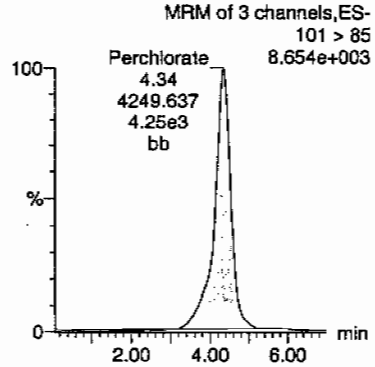
|LANL|940129|SOLID|MS|1|RA

01-15-10

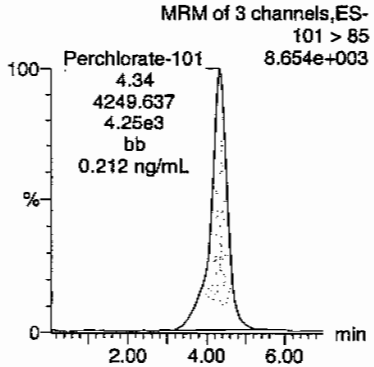
erchlorate



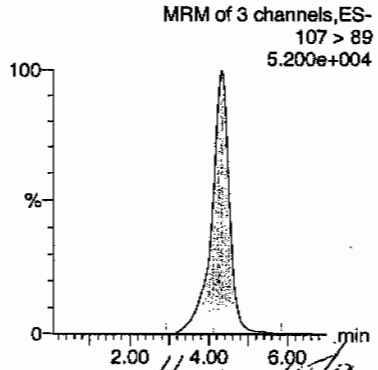
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmw 01/15/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202011799	Perchlorate	99 > 83	4.35	13723.387	13723.387	bb			0.2222	111.08	11.08	697.565	3.23
202011799	Perchlorate-101	101 > 85	4.34	4249.637	4249.637	bb			0.2121	106.05	6.05	282.807	
202011799	Perchlorate-O(18)	107 > 89	4.34	26735.686	26735.686	bb			0.4956	99.12	-0.88	5717.1...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 940125

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE12-10-7709MSD

Date Received: 09-JAN-10

GEL Job No (SDG): 10-1161-2

GEL Sample ID: 1202011800

Date Filtered: 12-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.593	2.37	2.57	ug/kg		1	14-JAN-10 19:59	per0114048a
	Perchlorate Isotope Ratio			3.23			1	14-JAN-10 19:59	per0114048a
14797-73-0	Perchlorate-101	.593	2.37	2.46	ug/kg		1	14-JAN-10 19:59	per0114048a
	Perchlorate-O(18)			5.78	ug/kg		1	14-JAN-10 19:59	per0114048a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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)uantify Sample Report MassLynx 4.0 SP4
'he GEL Group, LLC Analyst: Charlers W. Wilson

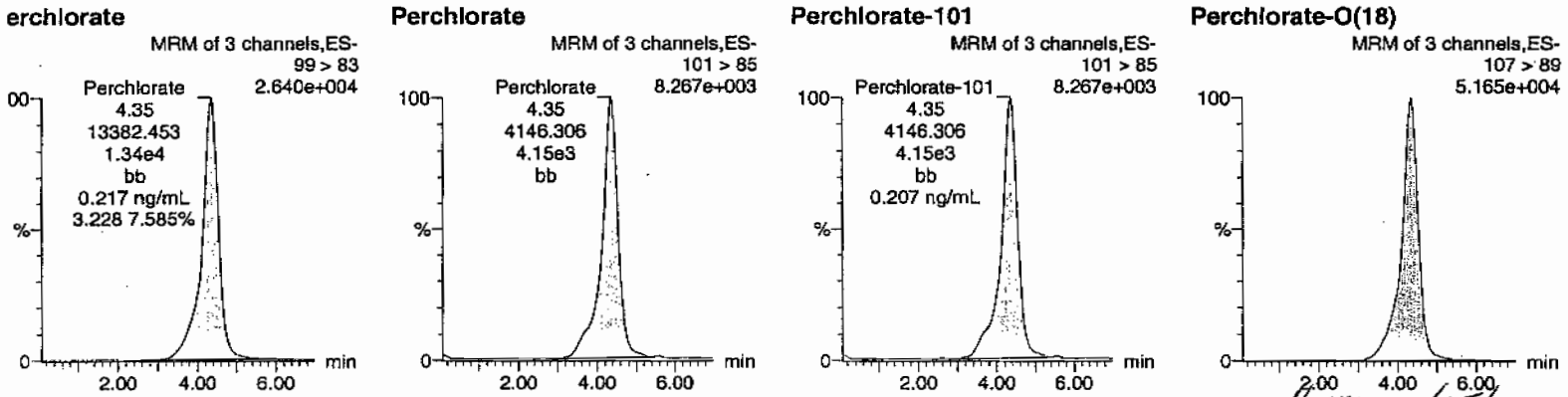
)ataset: C:\MassLynx\Perchlorate.PRO\per011410a.qld

ast Altered: Friday, January 15, 2010 7:53:06 AM Eastern Standard Time
'rinted: Friday, January 15, 2010 8:09:48 AM Eastern Standard Time

lame: per0114048a
)ate: 14-Jan-2010
'ime: 19:59:49
): 1202011800
'ial: 1:6,E

|LANL|940129|SOLID|MSD|1|

01-15-10



Amm 01/15/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202011800	Perchlorate	99 > 83	4.35	13382.453	13382.453	bb			0.2166	108.32	8.32	1189.7...	3.23
202011800	Perchlorate-101	101 > 85	4.35	4146.306	4146.306	bb			0.2069	103.47	3.47	328.191	
202011800	Perchlorate-O(18)	107 > 89	4.34	26255.121	26255.121	bb			0.4867	97.34	-2.66	2609.0...	

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MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 940125 **Verified by:** _____

Analyst: Charles Wilson **Lab SOP:** GL-OA-E-067 REV# 6

Method: SW846 6850 Modified **Instrument:** MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202011797 MB	12-JAN-2010 14:39:16	2	20	10
1202011798 LCS	12-JAN-2010 14:39:16	2	20	10
244125001	12-JAN-2010 14:39:16	2	20	10
244125002	12-JAN-2010 14:39:16	2	20	10
244125003	12-JAN-2010 14:39:16	2	20	10
244125004	12-JAN-2010 14:39:16	2	20	10
244137001	12-JAN-2010 14:39:16	2	20	10
244137002	12-JAN-2010 14:39:16	2	20	10
244137003	12-JAN-2010 14:39:16	2	20	10
244137004	12-JAN-2010 14:39:16	2	20	10
244137005	12-JAN-2010 14:39:16	2	20	10
244137006	12-JAN-2010 14:39:16	2	20	10
244137007	12-JAN-2010 14:39:16	2	20	10
244228001	12-JAN-2010 14:39:16	2	20	10
1202011799 MS (244228001)	12-JAN-2010 14:39:16	2	20	10
1202011800 MSD (244228001)	12-JAN-2010 14:39:16	2	20	10
244228002	12-JAN-2010 14:39:16	2	20	10
244228003	12-JAN-2010 14:39:16	2	20	10
244228004	12-JAN-2010 14:39:16	2	20	10
244228005	12-JAN-2010 14:39:16	2	20	10
244228006	12-JAN-2010 14:39:16	2	20	10
1202011801 ICS	12-JAN-2010 14:39:16	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202011801	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL
LCS	1202011798	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL
MS	1202011799	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL
MSD	1202011800	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL

Comments:

Desalting cartridges used: 091006-1-H & 090810-1-Ba

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 01/14/10
Extr. Injection Volume: 20uL
Sequence Number: per011410a
Initial Calibration Date: 01/14/10

Method: EPA 6850-Modified
Int. Std.: UCL091019-03.2
Mobile Phase Lot#: 1254342, 1246195
Standard-Samp Reagent Lot#:: 1233976

Reviewed BY: [illegible]
Date: 01/15/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100104-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0114001a	IPB001	CWW	1/14/2010 12:07			1		USE	B
per0114002a	IPB001	CWW	1/14/2010 12:17			1		USE	B
per0114003a	WCLICAL-01	CWW	1/14/2010 12:27			1		USE	I
per0114004a	WCLICAL-02	CWW	1/14/2010 12:37			1		USE	I
per0114005a	WCLICAL-03	CWW	1/14/2010 12:47			1		USE	I
per0114006a	WCLICAL-04	CWW	1/14/2010 12:57			1		USE	I
per0114007a	WCLICAL-05	CWW	1/14/2010 13:07			1		USE	I
per0114008a	IPB002	CWW	1/14/2010 13:17			1		USE	B
per0114009a	WCLICV	CWW	1/14/2010 13:27			1		USE	C
per0114010a	IPB003	CWW	1/14/2010 13:37			1		USE	B
per0114011a	WCLCRI	CWW	1/14/2010 13:47			1		USE	C
per0114012a	1202014474	CWW	1/14/2010 13:57	941221	10-1208	1	LANL	USE	S
per0114013a	1202014475	CWW	1/14/2010 14:07	941221	10-1208	1	LANL	USE	S
per0114014a	1202014478	CWW	1/14/2010 14:17	941221	10-1208	1	LANL	USE	S
per0114015a	244522001	CWW	1/14/2010 14:28	941221	10-1208	1	LANL	USE	S
per0114016a	1202014476	CWW	1/14/2010 14:38	941221	10-1208	1	LANL	USE	S
per0114017a	1202014477	CWW	1/14/2010 14:48	941221	10-1208	1	LANL	USE	S
per0114018a	WCLCCV	CWW	1/14/2010 14:58			1		USE	C
per0114019a	IPB004	CWW	1/14/2010 15:08			1		USE	B
per0114020a	WCLCRI	CWW	1/14/2010 15:18			1		USE	C
per0114021a	244218002	CWW	1/14/2010 15:28	940121	10-1152-1	1	LANL	USE	S
per0114022a	244218003	CWW	1/14/2010 15:38	940121	10-1152-~~2~~ 1	1	LANL	USE	S
per0114023a	244218004	CWW	1/14/2010 15:48	940121	10-1152-~~3~~ 1	1	LANL	USE	S
per0114024a	244218005	CWW	1/14/2010 15:58	940121	10-1152-~~4~~ 1	1	LANL	USE	S
per0114025a	IPB005	CWW	1/14/2010 16:08		[illegible] 01-15-10	1		USE	B
per0114026a	1202011797	CWW	1/14/2010 16:18	940129	VARIOUS	1	LANL	USE	S
per0114027a	1202011798	CWW	1/14/2010 16:28	940129	VARIOUS	1	LANL	USE	S
per0114028a	1202011801	CWW	1/14/2010 16:38	940129	VARIOUS	1	LANL	USE	S
per0114029a	244125001	CWW	1/14/2010 16:48	940129	10-1130	1	LANL	USE	S

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per0114030a	244125002	CWW	1/14/2010 16:58	940129	10-1130	1	LANL	USE	S
per0114031a	WCLCCV	CWW	1/14/2010 17:08			1		USE	C
per0114032a	IPB006	CWW	1/14/2010 17:18			1		USE	B
per0114033a	WCLCRI	CWW	1/14/2010 17:29			1		USE	C
per0114034a	244125003	CWW	1/14/2010 17:39	940129	10-1130	1	LANL	USE	S
per0114035a	244125004	CWW	1/14/2010 17:49	940129	10-1130	1	LANL	USE	S
per0114036a	244137001	CWW	1/14/2010 17:59	940129	10-1126	1	LANL	USE	S
per0114037a	244137002	CWW	1/14/2010 18:09	940129	10-1126	1	LANL	USE	S
per0114038a	244137003	CWW	1/14/2010 18:19	940129	10-1126	1	LANL	USE	S
per0114039a	244137004	CWW	1/14/2010 18:29	940129	10-1126	1	LANL	USE	S
per0114040a	244137005	CWW	1/14/2010 18:39	940129	10-1126	1	LANL	USE	S
per0114041a	244137006	CWW	1/14/2010 18:49	940129	10-1126	1	LANL	USE	S
per0114042a	244137007	CWW	1/14/2010 18:59	940129	10-1126	1	LANL	USE	S
per0114043a	WCLCCV	CWW	1/14/2010 19:09			1		USE	C
per0114044a	IPB007	CWW	1/14/2010 19:19			1		USE	B
per0114045a	WCLCRI	CWW	1/14/2010 19:29			1		USE	C
per0114046a	244228001	CWW	1/14/2010 19:39	940129	10-1161-2	1	LANL	USE	S
per0114047a	1202011799	CWW	1/14/2010 19:49	940129	10-1161-2	1	LANL	USE	S
per0114048a	1202011800	CWW	1/14/2010 19:59	940129	10-1161-2	1	LANL	USE	S
per0114049a	244228002	CWW	1/14/2010 20:09	940129	10-1161-2	1	LANL	USE	S
per0114050a	244228003	CWW	1/14/2010 20:19	940129	10-1161-2	1	LANL	USE	S
per0114051a	244228004	CWW	1/14/2010 20:29	940129	10-1161-2	1	LANL	USE	S
per0114052a	244228005	CWW	1/14/2010 20:40	940129	10-1161-2	1	LANL	USE	S
per0114053a	244228006	CWW	1/14/2010 20:50	940129	10-1161-2	1	LANL	USE	S
per0114054a	IPB008	CWW	1/14/2010 21:00			1		USE	B
per0114055a	244609001	CWW	1/14/2010 21:10	Screen		10	GEL	DUSE	S
per0114056a	WCLCCV	CWW	1/14/2010 21:20			1		USE	C
per0114057a	IPB009	CWW	1/14/2010 21:31			1		USE	B
per0114058a	WCLCRI	CWW	1/14/2010 21:41			1		USE	C

PROPRIETARY INFORMATION-No unauthorized reproduction without written permission from GEL.

Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1161

Sample Analysis

Sample ID	Client ID
244226001	RE12-10-7738
244226002	RE12-10-7737
1202011708	Method Blank (MB) **ICP**
1202011709	Laboratory Control Sample (LCS)
1202011712	244145001(RE12-10-7662L) Serial Dilution (SD)
1202011710	244145001(RE12-10-7662D) Sample Duplicate (DUP)
1202011711	244145001(RE12-10-7662S) Matrix Spike (MS)
1202011703	Method Blank (MB) **ICP-MS**
1202011704	Laboratory Control Sample (LCS)
1202011707	244240001(CALA-10-9162L) Serial Dilution (SD)
1202011705	244240001(CALA-10-9162D) Sample Duplicate (DUP)
1202011706	244240001(CALA-10-9162S) Matrix Spike (MS)
1202014309	Method Blank (MB) **CVAA**
1202014310	Laboratory Control Sample (LCS)
1202014313	244226001(RE12-10-7738L) Serial Dilution (SD)
1202014311	244226001(RE12-10-7738D) Sample Duplicate (DUP)
1202014312	244226001(RE12-10-7738S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	940084, 940082 and 941150
Prep Batch :	940083, 940079 and 941148
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3005/6010B, SW846 3005/6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 244145001 (RE12-10-7662)-ICP, 244240001 (CALA-10-9162)-ICP-MS and 244226001 (RE12-10-7738)-CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are

calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nick-Cole A. Elmore **Date:** 2.3.10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244226001 **BASIS:** As Received **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7738 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	01/14/10 02:12	100113-2	940082
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/21/10 16:50	100121-5	940082
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	01/14/10 02:12	100113-2	940082
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/18/10 19:01	011810-1	940084
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/18/10 19:01	011810-1	940084
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	01/14/10 02:12	100113-2	940082
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/18/10 19:01	011810-1	940084
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	SKJ	01/14/10 02:12	100113-2	940082
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/14/10 10:32	011410W1-6	941150
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-09-7	Potassium	112	ug/L	J	50	150	150	1	P	HSC	01/18/10 19:01	011810-1	940084
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	01/14/10 23:45	100114-3	940082
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	SKJ	01/14/10 02:12	100113-2	940082
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:01	011810-1	940084
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/18/10 19:01	011810-1	940084

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940082	940079	SW846 3005A	50	mL	50	mL	01/11/10	FGA
940084	940083	SW846 3005A	50	mL	50	mL	01/11/10	FGA
941150	941148	SW846 7470A Prep	20	mL	20	mL	01/13/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244226002 **BASIS:** As Received **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7737 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: WATER **%SOLIDS:** 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	01/14/10 02:18	100113-2	940082
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/21/10 16:52	100121-5	940082
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	01/14/10 02:18	100113-2	940082
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/18/10 19:22	011810-1	940084
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	01/18/10 19:22	011810-1	940084
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	01/14/10 02:18	100113-2	940082
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/18/10 19:22	011810-1	940084
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	SKJ	01/14/10 02:18	100113-2	940082
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/14/10 10:44	011410W1-6	941150
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-09-7	Potassium	120	ug/L	J	50	150	150	1	P	HSC	01/18/10 19:22	011810-1	940084
7782-49-2	Selenium	6.69	ug/L	J	5	30	30	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-23-5	Sodium	300	ug/L	U	100	300	300	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	SKJ	01/14/10 23:49	100114-3	940082
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	SKJ	01/14/10 02:18	100113-2	940082
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/18/10 19:22	011810-1	940084
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/18/10 19:22	011810-1	940084

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940082	940079	SW846 3005A	50	mL	50	mL	01/11/10	FGA
940084	940083	SW846 3005A	50	mL	50	mL	01/11/10	FGA
941150	941148	SW846 7470A Prep	20	mL	20	mL	01/13/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1161

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Antimony	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	13-JAN-10 19:40	100113-2
	Cadmium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	13-JAN-10 19:40	100113-2
	Lead	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	13-JAN-10 19:40	100113-2
	Manganese	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	13-JAN-10 19:40	100113-2
	Uranium	52.9	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	13-JAN-10 19:40	100113-2
	Mercury	5.06	ug/L	5	ug/L	101.1	90.0 – 110.0	AV	14-JAN-10 09:46	011410W1-6
	Thallium	48.6	ug/L	50	ug/L	97.2	90.0 – 110.0	MS	14-JAN-10 22:07	100114-3
	Aluminum	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Arsenic	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Barium	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Chromium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Cobalt	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Copper	519	ug/L	500	ug/L	103.7	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Iron	5090	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Magnesium	5320	ug/L	5000	ug/L	106.5	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Nickel	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Potassium	2530	ug/L	2500	ug/L	101.4	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Selenium	2630	ug/L	2500	ug/L	105.1	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Silver	265	ug/L	250	ug/L	106.2	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Sodium	2450	ug/L	2500	ug/L	98	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Vanadium	525	ug/L	500	ug/L	104.9	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Zinc	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	18-JAN-10 15:26	011810-1
	Beryllium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	21-JAN-10 16:10	100121-5
CCV01										
	Antimony	49.8	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	13-JAN-10 20:11	100113-2
	Cadmium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	13-JAN-10 20:11	100113-2
	Lead	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	13-JAN-10 20:11	100113-2
	Manganese	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	13-JAN-10 20:11	100113-2
	Uranium	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	13-JAN-10 20:11	100113-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Mercury	5.06	ug/L	5	ug/L	101.3	80.0 – 120.0	AV	14–JAN–10 09:52	011410W1–6
	Thallium	47.9	ug/L	50	ug/L	95.7	90.0 – 110.0	MS	14–JAN–10 22:27	100114–3
	Aluminum	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Arsenic	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Barium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Chromium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Nickel	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Potassium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Selenium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Silver	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Sodium	9760	ug/L	10000	ug/L	97.7	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Vanadium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Zinc	490	ug/L	500	ug/L	98	90.0 – 110.0	P	18–JAN–10 16:12	011810–1
	Beryllium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	21–JAN–10 16:18	100121–5
CCV02										
	Antimony	53.4	ug/L	50	ug/L	106.8	90.0 – 110.0	MS	13–JAN–10 20:29	100113–2
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	13–JAN–10 20:29	100113–2
	Lead	52	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	13–JAN–10 20:29	100113–2
	Manganese	51.9	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	13–JAN–10 20:29	100113–2
	Uranium	53.9	ug/L	50	ug/L	107.8	90.0 – 110.0	MS	13–JAN–10 20:29	100113–2
	Mercury	5.22	ug/L	5	ug/L	104.4	80.0 – 120.0	AV	14–JAN–10 10:15	011410W1–6
	Thallium	46.9	ug/L	50	ug/L	93.8	90.0 – 110.0	MS	14–JAN–10 23:00	100114–3
	Aluminum	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Arsenic	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Barium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	18–JAN–10 16:41	011810–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Calcium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Chromium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Cobalt	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Copper	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Nickel	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Potassium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Selenium	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Silver	498	ug/L	500	ug/L	99.5	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Sodium	9860	ug/L	10000	ug/L	98.6	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Vanadium	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Zinc	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	18–JAN–10 16:41	011810–1
	Beryllium	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	21–JAN–10 16:35	100121–5
CCV03										
	Antimony	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	13–JAN–10 21:13	100113–2
	Cadmium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	13–JAN–10 21:13	100113–2
	Lead	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	13–JAN–10 21:13	100113–2
	Manganese	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	13–JAN–10 21:13	100113–2
	Uranium	52.8	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	13–JAN–10 21:13	100113–2
	Mercury	5.3	ug/L	5	ug/L	106.1	80.0 – 120.0	AV	14–JAN–10 10:38	011410W1–6
	Thallium	46.2	ug/L	50	ug/L	92.4	90.0 – 110.0	MS	14–JAN–10 23:29	100114–3
	Aluminum	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Arsenic	505	ug/L	500	ug/L	101	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Barium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Calcium	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Chromium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Cobalt	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Copper	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Iron	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	18–JAN–10 17:59	011810–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–1161

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Magnesium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Nickel	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Potassium	4960	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Selenium	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Sodium	10000	ug/L	10000	ug/L	100.1	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Zinc	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	18–JAN–10 17:59	011810–1
	Beryllium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	21–JAN–10 16:53	100121–5
CCV04										
	Antimony	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	13–JAN–10 22:03	100113–2
	Cadmium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	13–JAN–10 22:03	100113–2
	Lead	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	13–JAN–10 22:03	100113–2
	Manganese	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	13–JAN–10 22:03	100113–2
	Uranium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	13–JAN–10 22:03	100113–2
	Mercury	5.05	ug/L	5	ug/L	101.1	80.0 – 120.0	AV	14–JAN–10 11:01	011410W1–6
	Thallium	47.3	ug/L	50	ug/L	94.6	90.0 – 110.0	MS	14–JAN–10 23:57	100114–3
	Aluminum	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Arsenic	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Barium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Calcium	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Chromium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Cobalt	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Copper	505	ug/L	500	ug/L	101	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Nickel	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Selenium	527	ug/L	500	ug/L	105.3	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Silver	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	18–JAN–10 19:08	011810–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 10–1161

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	9580	ug/L	10000	ug/L	95.8	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Vanadium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	18–JAN–10 19:08	011810–1
	Beryllium	54	ug/L	50	ug/L	107.9	90.0 – 110.0	MS	21–JAN–10 17:10	100121–5
CCV05										
	Antimony	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	13–JAN–10 22:58	100113–2
	Cadmium	49	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	13–JAN–10 22:58	100113–2
	Lead	50.5	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	13–JAN–10 22:58	100113–2
	Manganese	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	13–JAN–10 22:58	100113–2
	Uranium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	13–JAN–10 22:58	100113–2
	Thallium	47.7	ug/L	50	ug/L	95.5	90.0 – 110.0	MS	15–JAN–10 00:22	100114–3
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Arsenic	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Barium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Chromium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Copper	505	ug/L	500	ug/L	101	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Iron	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Magnesium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Nickel	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Selenium	520	ug/L	500	ug/L	103.9	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Silver	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Sodium	9140	ug/L	10000	ug/L	91.5	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Vanadium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
	Zinc	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	18–JAN–10 20:17	011810–1
CCV06										
	Antimony	48.8	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	13–JAN–10 23:36	100113–2
	Cadmium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	13–JAN–10 23:36	100113–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lead	50.4	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	13–JAN–10 23:36	100113–2
	Manganese	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	13–JAN–10 23:36	100113–2
	Uranium	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	13–JAN–10 23:36	100113–2
	Thallium	48.1	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	15–JAN–10 00:51	100114–3
CCV07										
	Antimony	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	14–JAN–10 00:13	100113–2
	Cadmium	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	14–JAN–10 00:13	100113–2
	Lead	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	14–JAN–10 00:13	100113–2
	Manganese	51.4	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	14–JAN–10 00:13	100113–2
	Uranium	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	14–JAN–10 00:13	100113–2
CCV08										
	Antimony	49.2	ug/L	50	ug/L	98.3	90.0 – 110.0	MS	14–JAN–10 01:03	100113–2
	Cadmium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	14–JAN–10 01:03	100113–2
	Lead	50.5	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	14–JAN–10 01:03	100113–2
	Manganese	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	14–JAN–10 01:03	100113–2
	Uranium	51.7	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	14–JAN–10 01:03	100113–2
CCV09										
	Antimony	48.3	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	14–JAN–10 01:53	100113–2
	Cadmium	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	14–JAN–10 01:53	100113–2
	Lead	50.4	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	14–JAN–10 01:53	100113–2
	Manganese	50.2	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	14–JAN–10 01:53	100113–2
	Uranium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	14–JAN–10 01:53	100113–2
CCV10										
	Antimony	47.7	ug/L	50	ug/L	95.5	90.0 – 110.0	MS	14–JAN–10 02:43	100113–2
	Cadmium	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	14–JAN–10 02:43	100113–2
	Lead	50.7	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	14–JAN–10 02:43	100113–2
	Manganese	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	14–JAN–10 02:43	100113–2
	Uranium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	14–JAN–10 02:43	100113–2
CCV11										
	Antimony	47.9	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	14–JAN–10 03:39	100113–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cadmium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	14–JAN–10 03:39	100113–2
	Lead	50.4	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	14–JAN–10 03:39	100113–2
	Manganese	50.1	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	14–JAN–10 03:39	100113–2
	Uranium	52.4	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	14–JAN–10 03:39	100113–2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1161

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Antimony	3.4	ug/L	3	ug/L	113.3	70.0 – 130.0	MS	13-JAN-10 19:52	100113-2
	Cadmium	1.11	ug/L	1	ug/L	110.7	70.0 – 130.0	MS	13-JAN-10 19:52	100113-2
	Uranium	.206	ug/L	.2	ug/L	103	70.0 – 130.0	MS	13-JAN-10 19:52	100113-2
	Manganese	5.72	ug/L	5	ug/L	114.3	70.0 – 130.0	MS	13-JAN-10 19:52	100113-2
	Lead	2.21	ug/L	2	ug/L	110.5	70.0 – 130.0	MS	13-JAN-10 19:52	100113-2
	Mercury	.238	ug/L	.2	ug/L	119	70.0 – 130.0	AV	14-JAN-10 09:50	011410W1-6
	Thallium	1.04	ug/L	1	ug/L	103.7	70.0 – 130.0	MS	14-JAN-10 22:15	100114-3
	Beryllium	.513	ug/L	.5	ug/L	102.6	70.0 – 130.0	MS	21-JAN-10 16:13	100121-5
PQL01										
	Aluminum	194	ug/L	200	ug/L	97.3	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Iron	77.2	ug/L	100	ug/L	77.2	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Magnesium	336	ug/L	300	ug/L	111.9	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Nickel	5.63	ug/L	5	ug/L	112.6	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Potassium	186	ug/L	150	ug/L	123.7	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Silver	5.2	ug/L	5	ug/L	104	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Sodium	276	ug/L	300	ug/L	91.9	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Arsenic	28.1	ug/L	30	ug/L	93.6	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Barium	5.31	ug/L	5	ug/L	106.2	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Chromium	5.34	ug/L	5	ug/L	106.9	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Cobalt	5.11	ug/L	5	ug/L	102.2	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Copper	11.1	ug/L	10	ug/L	111.3	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Vanadium	4.76	ug/L	5	ug/L	95.2	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Zinc	11.3	ug/L	10	ug/L	112.7	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Calcium	210	ug/L	200	ug/L	105.1	70.0 – 130.0	P	18-JAN-10 15:40	011810-1
	Selenium	32.6	ug/L	30	ug/L	108.6	70.0 – 130.0	P	18-JAN-10 15:40	011810-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–JAN–10 19:46	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	13–JAN–10 19:46	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	13–JAN–10 19:46	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	13–JAN–10 19:46	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–JAN–10 19:46	100113–2
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	14–JAN–10 09:48	011410W1–6
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	14–JAN–10 22:11	100114–3
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	18–JAN–10 15:33	011810–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	18–JAN–10 15:33	011810–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 15:33	011810–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	18–JAN–10 15:33	011810–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 15:33	011810–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 15:33	011810–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	18–JAN–10 15:33	011810–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	18–JAN–10 15:33	011810–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	18–JAN–10 15:33	011810–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	18–JAN–10 15:33	011810–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	18–JAN–10 15:33	011810–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	18–JAN–10 15:33	011810–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 15:33	011810–1
	Sodium	100	+/–300	U	100	300	LIQ	P	18–JAN–10 15:33	011810–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 15:33	011810–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	18–JAN–10 15:33	011810–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	21–JAN–10 16:11	100121–5
CCB01										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–JAN–10 20:17	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	13–JAN–10 20:17	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	13–JAN–10 20:17	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	13–JAN–10 20:17	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–JAN–10 20:17	100113–2
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	14–JAN–10 09:54	011410W1–6

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	14–JAN–10 22:31	100114–3
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	18–JAN–10 16:19	011810–1
	Arsenic	10.51	+/–30	J	5.0	30.0	LIQ	P	18–JAN–10 16:19	011810–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 16:19	011810–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	18–JAN–10 16:19	011810–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 16:19	011810–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 16:19	011810–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	18–JAN–10 16:19	011810–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	18–JAN–10 16:19	011810–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	18–JAN–10 16:19	011810–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	18–JAN–10 16:19	011810–1
	Potassium	80.32	+/–150	J	50.0	150	LIQ	P	18–JAN–10 16:19	011810–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	18–JAN–10 16:19	011810–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 16:19	011810–1
	Sodium	100	+/–300	U	100	300	LIQ	P	18–JAN–10 16:19	011810–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 16:19	011810–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	18–JAN–10 16:19	011810–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	21–JAN–10 16:19	100121–5
CCB02										
	Antimony	1.56	+/–3	J	1.0	3.0	LIQ	MS	13–JAN–10 20:36	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	13–JAN–10 20:36	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	13–JAN–10 20:36	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	13–JAN–10 20:36	100113–2
	Uranium	0.057	+/–.2	J	0.05	0.2	LIQ	MS	13–JAN–10 20:36	100113–2
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	14–JAN–10 10:17	011410W1–6
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	14–JAN–10 23:04	100114–3
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	18–JAN–10 16:49	011810–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	18–JAN–10 16:49	011810–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 16:49	011810–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	18–JAN–10 16:49	011810–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 16:49	011810–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 16:49	011810–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	18–JAN–10 16:49	011810–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	18–JAN–10 16:49	011810–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	18–JAN–10 16:49	011810–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	18–JAN–10 16:49	011810–1
	Potassium	59.3	+/–150	J	50.0	150	LIQ	P	18–JAN–10 16:49	011810–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	18–JAN–10 16:49	011810–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 16:49	011810–1
	Sodium	100	+/–300	U	100	300	LIQ	P	18–JAN–10 16:49	011810–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 16:49	011810–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	18–JAN–10 16:49	011810–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	21–JAN–10 16:36	100121–5
CCB03										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–JAN–10 21:19	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	13–JAN–10 21:19	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	13–JAN–10 21:19	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	13–JAN–10 21:19	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–JAN–10 21:19	100113–2
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	14–JAN–10 10:40	011410W1–6
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	14–JAN–10 23:33	100114–3
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	18–JAN–10 18:06	011810–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	18–JAN–10 18:06	011810–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 18:06	011810–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	18–JAN–10 18:06	011810–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 18:06	011810–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 18:06	011810–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	18–JAN–10 18:06	011810–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	18–JAN–10 18:06	011810–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	18–JAN–10 18:06	011810–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	18–JAN–10 18:06	011810–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	18–JAN–10 18:06	011810–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	5.36	+/–30	J	5.0	30.0	LIQ	P	18–JAN–10 18:06	011810–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 18:06	011810–1
	Sodium	100	+/–300	U	100	300	LIQ	P	18–JAN–10 18:06	011810–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 18:06	011810–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	18–JAN–10 18:06	011810–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	21–JAN–10 16:55	100121–5
CCB04										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–JAN–10 22:09	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	13–JAN–10 22:09	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	13–JAN–10 22:09	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	13–JAN–10 22:09	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–JAN–10 22:09	100113–2
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	14–JAN–10 11:03	011410W1–6
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	15–JAN–10 00:02	100114–3
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	18–JAN–10 19:15	011810–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	18–JAN–10 19:15	011810–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 19:15	011810–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	18–JAN–10 19:15	011810–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 19:15	011810–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 19:15	011810–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	18–JAN–10 19:15	011810–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	18–JAN–10 19:15	011810–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	18–JAN–10 19:15	011810–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	18–JAN–10 19:15	011810–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	18–JAN–10 19:15	011810–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	18–JAN–10 19:15	011810–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 19:15	011810–1
	Sodium	100	+/–300	U	100	300	LIQ	P	18–JAN–10 19:15	011810–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 19:15	011810–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	18–JAN–10 19:15	011810–1
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	21–JAN–10 17:11	100121–5

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB05										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–JAN–10 23:05	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	13–JAN–10 23:05	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	13–JAN–10 23:05	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	13–JAN–10 23:05	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–JAN–10 23:05	100113–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	15–JAN–10 00:26	100114–3
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	18–JAN–10 20:24	011810–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	18–JAN–10 20:24	011810–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 20:24	011810–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	18–JAN–10 20:24	011810–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 20:24	011810–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 20:24	011810–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	18–JAN–10 20:24	011810–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	18–JAN–10 20:24	011810–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	18–JAN–10 20:24	011810–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	18–JAN–10 20:24	011810–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	18–JAN–10 20:24	011810–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	18–JAN–10 20:24	011810–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 20:24	011810–1
	Sodium	100	+/–300	U	100	300	LIQ	P	18–JAN–10 20:24	011810–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	18–JAN–10 20:24	011810–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	18–JAN–10 20:24	011810–1
CCB06										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	13–JAN–10 23:42	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	13–JAN–10 23:42	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	13–JAN–10 23:42	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	13–JAN–10 23:42	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	13–JAN–10 23:42	100113–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	15–JAN–10 00:55	100114–3
CCB07										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	14–JAN–10 00:19	100113–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	14–JAN–10 00:19	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	14–JAN–10 00:19	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	14–JAN–10 00:19	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	14–JAN–10 00:19	100113–2
CCB08										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	14–JAN–10 01:09	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	14–JAN–10 01:09	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	14–JAN–10 01:09	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	14–JAN–10 01:09	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	14–JAN–10 01:09	100113–2
CCB09										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	14–JAN–10 01:59	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	14–JAN–10 01:59	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	14–JAN–10 01:59	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	14–JAN–10 01:59	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	14–JAN–10 01:59	100113–2
CCB10										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	14–JAN–10 02:49	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	14–JAN–10 02:49	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	14–JAN–10 02:49	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	14–JAN–10 02:49	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	14–JAN–10 02:49	100113–2
CCB11										
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	14–JAN–10 03:46	100113–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	14–JAN–10 03:46	100113–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	14–JAN–10 03:46	100113–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	14–JAN–10 03:46	100113–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	14–JAN–10 03:46	100113–2

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–1161

Contract: LANL01004

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202011703								
	Antimony	1	ug/L	+/–3	U	MS	1	3
	Beryllium	0.1	ug/L	+/–0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/–1	U	MS	0.11	1
	Lead	0.5	ug/L	+/–2	U	MS	0.5	2
	Manganese	1	ug/L	+/–5	U	MS	1	5
	Thallium	0.3	ug/L	+/–1	U	MS	0.3	1
	Uranium	0.05	ug/L	+/–0.2	U	MS	0.05	0.2
1202011708								
	Aluminum	68	ug/L	+/–200	U	P	68	200
	Arsenic	5	ug/L	+/–30	U	P	5	30
	Barium	1	ug/L	+/–5	U	P	1	5
	Calcium	50	ug/L	+/–200	U	P	50	200
	Chromium	1	ug/L	+/–5	U	P	1	5
	Cobalt	1	ug/L	+/–5	U	P	1	5
	Copper	3	ug/L	+/–10	U	P	3	10
	Iron	30	ug/L	+/–100	U	P	30	100
	Magnesium	85	ug/L	+/–300	U	P	85	300
	Nickel	1.5	ug/L	+/–5	U	P	1.5	5
	Potassium	50	ug/L	+/–150	U	P	50	150
	Selenium	5	ug/L	+/–30	U	P	5	30
	Silver	1	ug/L	+/–5	U	P	1	5
	Sodium	100	ug/L	+/–300	U	P	100	300
	Vanadium	1	ug/L	+/–5	U	P	1	5
	Zinc	3.3	ug/L	+/–10	U	P	3.3	10
1202014309								
	Mercury	0.066	ug/L	+/–0.2	U	AV	0.066	0.2

METALS
–4–
Interference Check Sample

SDG No: 10–1161

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	521000	ug/L	500000	ug/L	104	80.0 – 120.0	18–JAN–10 15:47	011810–1
	Arsenic	10.4	ug/L					18–JAN–10 15:47	011810–1
	Barium	0.39	ug/L					18–JAN–10 15:47	011810–1
	Calcium	480000	ug/L	500000	ug/L	95.9	80.0 – 120.0	18–JAN–10 15:47	011810–1
	Chromium	1.66	ug/L					18–JAN–10 15:47	011810–1
	Cobalt	–1.59	ug/L					18–JAN–10 15:47	011810–1
	Copper	1.87	ug/L					18–JAN–10 15:47	011810–1
	Iron	186000	ug/L	200000	ug/L	93	80.0 – 120.0	18–JAN–10 15:47	011810–1
	Magnesium	486000	ug/L	500000	ug/L	97.2	80.0 – 120.0	18–JAN–10 15:47	011810–1
	Nickel	4.18	ug/L					18–JAN–10 15:47	011810–1
	Potassium	–203.0	ug/L					18–JAN–10 15:47	011810–1
	Selenium	23.2	ug/L					18–JAN–10 15:47	011810–1
	Silver	0.48	ug/L					18–JAN–10 15:47	011810–1
	Sodium	10.5	ug/L					18–JAN–10 15:47	011810–1
	Vanadium	–2.26	ug/L					18–JAN–10 15:47	011810–1
	Zinc	8.99	ug/L					18–JAN–10 15:47	011810–1
ICSAB01									
	Aluminum	533000	ug/L	500000	ug/L	107	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Arsenic	519	ug/L	500	ug/L	104	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Barium	496	ug/L	500	ug/L	99.1	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Calcium	486000	ug/L	500000	ug/L	97.2	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Chromium	488	ug/L	500	ug/L	97.6	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Cobalt	439	ug/L	500	ug/L	87.8	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Copper	555	ug/L	500	ug/L	111	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Iron	186000	ug/L	200000	ug/L	92.8	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Magnesium	488000	ug/L	500000	ug/L	97.5	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Nickel	447	ug/L	500	ug/L	89.4	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Potassium	5300	ug/L	5000	ug/L	106	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Selenium	2540	ug/L	2500	ug/L	102	80.0 – 120.0	18–JAN–10 15:53	011810–1

METALS
–4–
Interference Check Sample

SDG No: 10–1161

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Silver	273	ug/L	250	ug/L	109	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Sodium	5310	ug/L	5000	ug/L	106	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Vanadium	512	ug/L	500	ug/L	102	80.0 – 120.0	18–JAN–10 15:53	011810–1
	Zinc	502	ug/L	500	ug/L	100	80.0 – 120.0	18–JAN–10 15:53	011810–1

METALS
–4–
Interference Check Sample

SDG No: 10–1161

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.191	ug/L					13–JAN–10 19:58	100113–2
	Cadmium	0.52	ug/L					13–JAN–10 19:58	100113–2
	Lead	0.172	ug/L					13–JAN–10 19:58	100113–2
	Manganese	5.63	ug/L					13–JAN–10 19:58	100113–2
	Uranium	–0.025	ug/L					13–JAN–10 19:58	100113–2
ICSAB01									
	Antimony	22.7	ug/L	20.1	ug/L	113	80.0 – 120.0	13–JAN–10 20:05	100113–2
	Cadmium	20.2	ug/L	20.4	ug/L	99.1	80.0 – 120.0	13–JAN–10 20:05	100113–2
	Lead	19.0	ug/L	20.5	ug/L	92.6	80.0 – 120.0	13–JAN–10 20:05	100113–2
	Manganese	25.6	ug/L	25.8	ug/L	99	80.0 – 120.0	13–JAN–10 20:05	100113–2
	Uranium	20.3	ug/L	20	ug/L	101	80.0 – 120.0	13–JAN–10 20:05	100113–2

METALS
-4-
Interference Check Sample

SDG No: 10-1161

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Thallium	-0.034	ug/L					14-JAN-10 22:19	100114-3
ICSAB01									
	Thallium	17.5	ug/L	20	ug/L	87.3	80.0 - 120.0	14-JAN-10 22:23	100114-3

METALS
–4–
Interference Check Sample

SDG No: 10–1161

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.051	ug/L					21–JAN–10 16:14	100121–5
ICSAB01									
	Beryllium	19.6	ug/L	20	ug/L	97.9	80.0 – 120.0	21–JAN–10 16:16	100121–5

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–1161 **Client ID** CALA–10–9162S

Contract: ESHL01000 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 244240001 **Spike ID:** 1202011706

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75–125	214		0.5	U	200	107		MS
Beryllium	ug/L	75–125	55.2		0.134	J	50	110		MS
Cadmium	ug/L	75–125	10.3		0.11	U	10	103		MS
Lead	ug/L	75–125	39.1		0.5	U	40	97.7		MS
Manganese	ug/L	75–125	45.2		1	U	50	89.2		MS
Thallium	ug/L	75–125	83.2		0.3	U	100	83.1		MS
Uranium	ug/L	75–125	51.5		0.605		50	102		MS

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–1161 **Client ID** RE12–10–7662S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 244145001 **Spike ID:** 1202011711

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75–125	5440		235		5000	104		P
Arsenic	ug/L	75–125	508		5	U	500	102		P
Barium	ug/L	75–125	513		2.99	J	500	102		P
Calcium	ug/L	75–125	5050		63.1	J	5000	99.8		P
Chromium	ug/L	75–125	502		1.48	J	500	100		P
Cobalt	ug/L	75–125	487		1	U	500	97.4		P
Copper	ug/L	75–125	513		3	U	500	102		P
Iron	ug/L	75–125	5200		122		5000	102		P
Magnesium	ug/L	75–125	5130		85	U	5000	101		P
Nickel	ug/L	75–125	500		1.5	U	500	99.8		P
Potassium	ug/L	75–125	5150		148	J	5000	100		P
Selenium	ug/L	75–125	504		5	U	500	101		P
Silver	ug/L	75–125	493		1	U	500	98.6		P
Sodium	ug/L	75–125	5120		175	J	5000	99		P
Vanadium	ug/L	75–125	510		1	U	500	102		P
Zinc	ug/L	75–125	490		3.3	U	500	97.4		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–1161 **Client ID** RE12–10–7738S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 244226001 **Spike ID:** 1202014312

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.14		0.066	U	2	107		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** CALA–10–9162D

Sample ID: 244240001 **Duplicate ID:** 1202011705 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	U			MS
Beryllium	ug/L	+/–.5	0.134	J	0.11	J	19.7		MS
Cadmium	ug/L		0.11	U	0.11	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Manganese	ug/L		1	U	1	U			MS
Thallium	ug/L		0.3	U	0.3	U			MS
Uranium	ug/L	+/–.2	0.605		0.621		2.61		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE12–10–7662D

Sample ID: 244145001 **Duplicate ID:** 1202011710 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/–200	235		251		6.5		P
Arsenic	ug/L		5	U	5	U			P
Barium	ug/L	+/–5	2.99	J	3.23	J	7.87		P
Calcium	ug/L	+/–200	63.1	J	54	J	15.6		P
Chromium	ug/L	+/–5	1.48	J	1.26	J	16.1		P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L	+/–100	122		133		8.51		P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L	+/–150	148	J	122	J	19.4		P
Selenium	ug/L		5	U	5	U			P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L	+/–300	175	J	170	J	3.35		P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L		3.3	U	3.3	U			P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1161

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE12-10-7738D

Sample ID: 244226001 **Duplicate ID:** 1202014311 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066	U	0.066	U			AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1161

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202011704								
	Antimony	ug/L	50	51.8		104	80-120	MS
	Beryllium	ug/L	50	55.1		110	80-120	MS
	Cadmium	ug/L	50	49		98	80-120	MS
	Lead	ug/L	50	49.8		99.7	80-120	MS
	Manganese	ug/L	50	49.3		98.7	80-120	MS
	Thallium	ug/L	50	44.2		88.5	80-120	MS
	Uranium	ug/L	50	50.7		101	80-120	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–1161

Contract: LANL01004

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202011709								
	Aluminum	ug/L	5000	4990		99.9	80–120	P
	Arsenic	ug/L	500	494		98.9	80–120	P
	Barium	ug/L	500	499		99.7	80–120	P
	Calcium	ug/L	5000	4980		99.7	80–120	P
	Chromium	ug/L	500	489		97.7	80–120	P
	Cobalt	ug/L	500	476		95.2	80–120	P
	Copper	ug/L	500	495		99	80–120	P
	Iron	ug/L	5000	5060		101	80–120	P
	Magnesium	ug/L	5000	5110		102	80–120	P
	Nickel	ug/L	500	487		97.4	80–120	P
	Potassium	ug/L	5000	4940		98.7	80–120	P
	Selenium	ug/L	500	503		101	80–120	P
	Silver	ug/L	500	486		97.3	80–120	P
	Sodium	ug/L	5000	5110		102	80–120	P
	Vanadium	ug/L	500	497		99.5	80–120	P
	Zinc	ug/L	500	482		96.3	80–120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1161

Contract: LANL01004

Aqueous LCS Source:GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202014310								
	Mercury	ug/L	2	2.15		107	80-120	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1161 **Client ID** CALA-10-9162L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 244240001 **Serial Dilution ID:** 1202011707

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Beryllium	.134	J	.5	U	100			MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Manganese	1	U	5	U				MS
Thallium	.3	U	5.65					MS
Uranium	.605		.585	J	3.31			MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1161 **Client ID** RE12-10-7662L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 244145001 **Serial Dilution ID:** 1202011712

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	235		340	U	100			P
Arsenic	5	U	25	U				P
Barium	2.99	J	5	U	100			P
Calcium	63.1	J	250	U	100			P
Chromium	1.48	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	122		157	J	28.3			P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	148	J	250	U	100			P
Selenium	5	U	26.3	J				P
Silver	1	U	5	U				P
Sodium	175	J	500	U	100			P
Vanadium	1	U	5	U				P
Zinc	3.3	U	16.5	U				P

METALS
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Serial Dilution Sample Summary

SDG NO. 10-1161 **Client ID** RE12-10-7738L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 244226001 **Serial Dilution ID:** 1202014313

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-1161 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 940083							
1202011708	MB for batch 940083	MB	W	11-JAN-10	50mL	50mL	
1202011709	LCS for batch 940083	LCS	W	11-JAN-10	50mL	50mL	
1202011711	RE12-10-7662S	MS	W	11-JAN-10	50mL	50mL	
1202011710	RE12-10-7662D	DUP	W	11-JAN-10	50mL	50mL	
244226001	RE12-10-7738	SAMPLE	W	11-JAN-10	50mL	50mL	
244226002	RE12-10-7737	SAMPLE	W	11-JAN-10	50mL	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–1161 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	940079						
1202011703	MB for batch 940079	MB	G	11–JAN–10	50mL	50mL	
1202011704	LCS for batch 940079	LCS	G	11–JAN–10	50mL	50mL	
1202011706	CALA–10–9162S	MS	G	11–JAN–10	50mL	50mL	
1202011705	CALA–10–9162D	DUP	G	11–JAN–10	50mL	50mL	
244226001	RE12–10–7738	SAMPLE	W	11–JAN–10	50mL	50mL	
244226002	RE12–10–7737	SAMPLE	W	11–JAN–10	50mL	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–1161 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 941148							
1202014309	MB for batch 941148	MB	W	13–JAN–10	20mL	20mL	
1202014310	LCS for batch 941148	LCS	W	13–JAN–10	20mL	20mL	
1202014312	RE12–10–7738S	MS	W	13–JAN–10	20mL	20mL	
1202014311	RE12–10–7738D	DUP	W	13–JAN–10	20mL	20mL	
244226001	RE12–10–7738	SAMPLE	W	13–JAN–10	20mL	20mL	
244226002	RE12–10–7737	SAMPLE	W	13–JAN–10	20mL	20mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 21-JAN-10 **End Date:** 21-JAN-10

Client Sdg: 10-1161
Method MS
Data File: 100121-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	16:05					X																			
S10	1	16:06					X																			
S100	1	16:08					X																			
ICV01	1	16:10					X																			
ICB01	1	16:11					X																			
CRDL01	1	16:13					X																			
ICSA01	1	16:14					X																			
ICSAB01	1	16:16					X																			
CCV01	1	16:18					X																			
CCB01	1	16:19					X																			
1202011703	1	16:21					X																			
1202011704	1	16:23					X																			
ZZZZZZ	1	16:25																								
ZZZZZZ	1	16:26																								
ZZZZZZ	1	16:28																								
ZZZZZZ	1	16:30																								
ZZZZZZ	1	16:31																								
ZZZZZZ	1	16:33																								
CCV02	1	16:35					X																			
CCB02	1	16:36					X																			
ZZZZZZ	1	16:41																								
ZZZZZZ	1	16:43																								
ZZZZZZ	1	16:45																								
ZZZZZZ	1	16:46																								
ZZZZZZ	1	16:48																								
244226001	1	16:50					X																			
244226002	1	16:52					X																			
CCV03	1	16:53					X																			
CCB03	1	16:55					X																			
ZZZZZZ	1	17:03																								
1202011705	1	17:04					X																			
1202011706	1	17:06					X																			
1202011707	5	17:08					X																			
CCV04	1	17:10					X																			
CCB04	1	17:11					X																			

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 18–JAN–10 **End Date:** 18–JAN–10

Client Sdg: 10–1161
Method P
Data File: 011810–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	14:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	15:00			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	15:06	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	15:13	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	15:20	X						X				X		X							X				
ICV01	1	15:26	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	15:33	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	15:40	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	15:47	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	15:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	15:59	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	16:05	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	16:12	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	16:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	16:35	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	16:41	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	16:49	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202011708	1	16:56	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202011709	1	17:03	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	17:09																								
ZZZZZZ	1	17:16																								
ZZZZZZ	1	17:23																								
ZZZZZZ	1	17:30																								
ZZZZZZ	1	17:37																								
ZZZZZZ	1	17:45																								
1202011710	1	17:52	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV03	1	17:59	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	18:06	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202011711	1	18:12	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202011712	5	18:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	18:26																								
ZZZZZZ	1	18:33																								
ZZZZZZ	1	18:40																								
ZZZZZZ	1	18:47																								
ZZZZZZ	1	18:54																								
244226001	1	19:01	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV04	1	19:08	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	19:15	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
244226002	1	19:22	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	19:29																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	19:36																							
ZZZZZZ	1	19:43																							
ZZZZZZ	1	19:49																							
ZZZZZZ	1	19:56																							
ZZZZZZ	1	20:03																							
ZZZZZZ	1	20:10																							
CCV05	1	20:17	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB05	1	20:24	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 14–JAN–10 **End Date:** 14–JAN–10

Client Sdg: 10–1161
Method AV
Data File: 011410W1–6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:35															X									
S0.2	1	09:37															X									
S0.5	1	09:39															X									
S2.0	1	09:41															X									
S5.0	1	09:43															X									
S10.0	1	09:44															X									
ICV01	1	09:46															X									
ICB01	1	09:48															X									
CRDL01	1	09:50															X									
CCV01	1	09:52															X									
CCB01	1	09:54															X									
ZZZZZZ	1	09:56																								
ZZZZZZ	1	09:58																								
ZZZZZZ	1	10:00																								
ZZZZZZ	1	10:02																								
ZZZZZZ	1	10:04																								
ZZZZZZ	5	10:06																								
ZZZZZZ	1	10:07																								
ZZZZZZ	1	10:09																								
ZZZZZZ	1	10:11																								
ZZZZZZ	1	10:13																								
CCV02	1	10:15															X									
CCB02	1	10:17															X									
ZZZZZZ	1	10:19																								
ZZZZZZ	5	10:21																								
1202014309	1	10:23															X									
1202014310	1	10:25															X									
ZZZZZZ	1	10:27																								
ZZZZZZ	1	10:29																								
ZZZZZZ	1	10:31																								
244226001	1	10:32															X									
1202014311	1	10:34															X									
1202014312	1	10:36															X									
CCV03	1	10:38															X									
CCB03	1	10:40															X									
1202014313	5	10:42															X									
244226002	1	10:44															X									
ZZZZZZ	1	10:46																								
ZZZZZZ	1	10:48																								
ZZZZZZ	1	10:50																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	10:52																							
ZZZZZZ	1	10:54																							
ZZZZZZ	1	10:56																							
ZZZZZZ	1	10:58																							
ZZZZZZ	1	10:59																							
CCV04	1	11:01														X									
CCB04	1	11:03														X									

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 13-JAN-10 **End Date:** 14-JAN-10

Client Sdg: 10-1161
Method MS
Data File: 100113-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	19:21		X				X						X		X								X		
S10	1	19:28		X				X						X		X								X		
S100	1	19:34		X				X						X		X								X		
ICV01	1	19:40		X				X						X		X								X		
ICB01	1	19:46		X				X						X		X								X		
CRDL01	1	19:52		X				X						X		X								X		
ICSA01	1	19:58		X				X						X		X								X		
ICSAB01	1	20:05		X				X						X		X								X		
CCV01	1	20:11		X				X						X		X								X		
CCB01	1	20:17		X				X						X		X								X		
LR01	1	20:23		X				X						X		X								X		
CCV02	1	20:29		X				X						X		X								X		
CCB02	1	20:36		X				X						X		X								X		
ZZZZZZ	2	20:42																								
ZZZZZZ	40	20:48																								
ZZZZZZ	2	20:54																								
ZZZZZZ	2	21:00																								
ZZZZZZ	2	21:07																								
CCV03	1	21:13		X				X						X		X								X		
CCB03	1	21:19		X				X						X		X								X		
ZZZZZZ	2	21:25																								
ZZZZZZ	10	21:31																								
ZZZZZZ	2	21:38																								
ZZZZZZ	2	21:44																								
ZZZZZZ	2	21:50																								
ZZZZZZ	2	21:56																								
CCV04	1	22:03		X				X						X		X								X		
CCB04	1	22:09		X				X						X		X								X		
ZZZZZZ	2	22:15																								
ZZZZZZ	2	22:21																								
ZZZZZZ	2	22:27																								
ZZZZZZ	2	22:34																								
ZZZZZZ	2	22:40																								
ZZZZZZ	2	22:46																								
ZZZZZZ	2	22:52																								
CCV05	1	22:58		X				X						X		X								X		
CCB05	1	23:05		X				X						X		X								X		
ZZZZZZ	2	23:11																								
ZZZZZZ	2	23:17																								
ZZZZZZ	2	23:23																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	2	23:30																								
CCV06	1	23:36		X				X						X		X								X		
CCB06	1	23:42		X				X						X		X								X		
ZZZZZZ	2	23:48																								
ZZZZZZ	2	23:55																								
ZZZZZZ	2	00:01																								
ZZZZZZ	2	00:07																								
CCV07	1	00:13		X				X						X		X								X		
CCB07	1	00:19		X				X						X		X								X		
1202011703	1	00:26		X				X						X		X								X		
1202011704	1	00:32		X				X						X		X								X		
ZZZZZZ	1	00:38																								
ZZZZZZ	1	00:44																								
ZZZZZZ	1	00:51																								
ZZZZZZ	1	00:57																								
CCV08	1	01:03		X				X						X		X								X		
CCB08	1	01:09		X				X						X		X								X		
ZZZZZZ	1	01:16																								
ZZZZZZ	1	01:22																								
ZZZZZZ	1	01:28																								
ZZZZZZ	1	01:34																								
ZZZZZZ	1	01:41																								
ZZZZZZ	1	01:47																								
CCV09	1	01:53		X				X						X		X								X		
CCB09	1	01:59		X				X						X		X								X		
ZZZZZZ	1	02:06																								
244226001	1	02:12		X				X						X		X								X		
244226002	1	02:18		X				X						X		X								X		
ZZZZZZ	1	02:24																								
ZZZZZZ	1	02:31																								
ZZZZZZ	1	02:37																								
CCV10	1	02:43		X				X						X		X								X		
CCB10	1	02:49		X				X						X		X								X		
ZZZZZZ	1	02:56																								
ZZZZZZ	1	03:02																								
ZZZZZZ	1	03:08																								
1202011705	1	03:14		X				X						X		X								X		
1202011706	1	03:21		X				X						X		X								X		
1202011707	5	03:27		X				X						X		X								X		
ZZZZZZ	1	03:33																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
CCV11	1	03:39		X				X						X		X								X		
CCB11	1	03:46		X				X						X		X								X		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 14-JAN-10 **End Date:** 15-JAN-10

Client Sdg: 10-1161
Method MS
Data File: 100114-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	21:54																					X			
S10	1	21:59																					X			
S100	1	22:03																					X			
ICV01	1	22:07																					X			
ICB01	1	22:11																					X			
CRDL01	1	22:15																					X			
ICSA01	1	22:19																					X			
ICSAB01	1	22:23																					X			
CCV01	1	22:27																					X			
CCB01	1	22:31																					X			
1202011703	1	22:35																					X			
1202011704	1	22:39																					X			
ZZZZZZ	1	22:43																								
ZZZZZZ	1	22:47																								
ZZZZZZ	1	22:52																								
ZZZZZZ	1	22:56																								
CCV02	1	23:00																					X			
CCB02	1	23:04																					X			
ZZZZZZ	1	23:08																								
ZZZZZZ	1	23:12																								
ZZZZZZ	1	23:16																								
ZZZZZZ	1	23:20																								
ZZZZZZ	1	23:25																								
CCV03	1	23:29																					X			
CCB03	1	23:33																					X			
ZZZZZZ	1	23:37																								
ZZZZZZ	1	23:41																								
244226001	1	23:45																					X			
244226002	1	23:49																					X			
ZZZZZZ	1	23:53																								
CCV04	1	23:57																					X			
CCB04	1	00:02																					X			
ZZZZZZ	1	00:06																								
ZZZZZZ	1	00:10																								
ZZZZZZ	1	00:14																								
ZZZZZZ	1	00:18																								
CCV05	1	00:22																					X			
CCB05	1	00:26																					X			
ZZZZZZ	1	00:30																								
1202011705	1	00:35																					X			

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
1202011706	1	00:39																				X			
1202011707	5	00:43																				X			
ZZZZZZ	1	00:47																							
CCV06	1	00:51																				X			
CCB06	1	00:55																				X			

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–1161

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 10–1161

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Mercury		0.066	.2

METALS
–10–
Instrument Detection Limits

SDG NO. 10–1161

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.85580	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.44491	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.63547	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.37026	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-15.4932
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-9.37529
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.55360	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.81635	-4.04400	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–1161

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

METALS
-12-
Linear Ranges

SDG NO. 10-1161

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–1161

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09

Raw Data

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Analysis Begun

Start Time: 1/18/2010 14:53:34 **Plasma On Time: 1/18/2010 05:48:39**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\011810.sif
Batch ID:
Results Data Set: 011810
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 1/18/2010 14:51:13**
IEC File: 011110.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 1/18/2010 14:53:36**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5291.6	5291.6	99.3	%	14:55:28
1	Y RADIAL	5630.8	5630.8	99.75	%	14:55:28
1	Al 396.153Radial†	-0.5	-0.5	[0.00]	ug/L	14:55:28

1	Ca 317.933Radial†	21.6	21.8	[0.00]	ug/L	14:55:48
1	Fe 238.204 Radial†	12.8	12.9	[0.00]	ug/L	14:55:48
1	K 766.490 Radial†	2680.8	2698.8	[0.00]	ug/L	14:55:28
1	Mg 279.077 IEC†	2.7	2.7	[0.00]	ug/L	14:55:48
1	Na 589.592 Radial†	-1116.6	-1124.0	[0.00]	ug/L	14:55:28
1	Sr 421.552†	19.1	19.3	[0.00]	ug/L	14:55:28
1	Sc 361.383	947840.7	947840.7	100.39	%	14:56:45
1	Y 371.029	800018.1	800018.1	100.33	%	14:56:45
1	Ag 328.068†	374.1	372.6	[0.00]	ug/L	14:56:50
1	As 188.979†	-22.3	-22.2	[0.00]	ug/L	14:57:10
1	B 249.677†	-539.2	-537.1	[0.00]	ug/L	14:57:10
1	Ba 233.527†	20.4	20.3	[0.00]	ug/L	14:57:10
1	Be 313.107†	-4556.9	-4539.2	[0.00]	ug/L	14:56:50
1	Cd 226.502†	-212.0	-211.1	[0.00]	ug/L	14:57:10
1	Co 228.616†	-88.3	-88.0	[0.00]	ug/L	14:57:10
1	Cr 267.716†	69.8	69.5	[0.00]	ug/L	14:57:10
1	Cu 324.752†	6196.6	6172.4	[0.00]	ug/L	14:56:50
1	Mn 257.610†	446.8	445.1	[0.00]	ug/L	14:57:10
1	Mo 202.031†	16.1	16.0	[0.00]	ug/L	14:57:10
1	Ni 231.604†	100.4	100.0	[0.00]	ug/L	14:57:10
1	P 214.914†	237.9	237.0	[0.00]	ug/L	14:57:10
1	Pb 220.353†	-40.8	-40.6	[0.00]	ug/L	14:57:10
1	S 181.975 Axial†	41.0	40.9	[0.00]	ug/L	14:57:10
1	Sb 206.836†	38.3	38.2	[0.00]	ug/L	14:57:10
1	Se 196.026†	-27.9	-27.8	[0.00]	ug/L	14:57:10
1	Si 251.611†	494.4	492.5	[0.00]	ug/L	14:57:10
1	Sn 189.927†	7.0	6.9	[0.00]	ug/L	14:57:10
1	Ti 334.940†	-1405.3	-1399.8	[0.00]	ug/L	14:56:50
1	Tl 190.801†	-35.9	-35.7	[0.00]	ug/L	14:57:10
1	U 409.014†	-1779.5	-1772.6	[0.00]	ug/L	14:56:45
1	V 292.402†	-1439.5	-1433.9	[0.00]	ug/L	14:56:50
1	Zn 213.857†	701.2	698.5	[0.00]	ug/L	14:57:10
1	SiO2†	538.8	536.7	[0.00]	ug/L	14:58:16
2	Sc Radial	5360.6	5360.6	101	%	14:55:53
2	Y RADIAL	5650.4	5650.4	100.1	%	14:55:53
2	Al 396.153Radial†	-0.7	-0.7	[0.00]	ug/L	14:55:53
2	Ca 317.933Radial†	17.2	17.1	[0.00]	ug/L	14:56:13
2	Fe 238.204 Radial†	12.4	12.4	[0.00]	ug/L	14:56:13
2	K 766.490 Radial†	2752.5	2735.3	[0.00]	ug/L	14:55:53
2	Mg 279.077 IEC†	2.3	2.3	[0.00]	ug/L	14:56:13
2	Na 589.592 Radial†	-1068.9	-1062.3	[0.00]	ug/L	14:55:53
2	Sr 421.552†	8.4	8.4	[0.00]	ug/L	14:55:53
2	Sc 361.383	940339.5	940339.5	99.596	%	14:57:15
2	Y 371.029	793747.5	793747.5	99.546	%	14:57:15
2	Ag 328.068†	483.8	485.8	[0.00]	ug/L	14:57:20
2	As 188.979†	-17.0	-17.0	[0.00]	ug/L	14:57:40
2	B 249.677†	-541.7	-543.9	[0.00]	ug/L	14:57:40
2	Ba 233.527†	24.4	24.5	[0.00]	ug/L	14:57:40
2	Be 313.107†	-4515.2	-4533.5	[0.00]	ug/L	14:57:20
2	Cd 226.502†	-214.0	-214.8	[0.00]	ug/L	14:57:40
2	Co 228.616†	-72.7	-73.0	[0.00]	ug/L	14:57:40
2	Cr 267.716†	82.4	82.7	[0.00]	ug/L	14:57:40
2	Cu 324.752†	6145.8	6170.7	[0.00]	ug/L	14:57:20
2	Mn 257.610†	452.5	454.4	[0.00]	ug/L	14:57:40
2	Mo 202.031†	20.5	20.6	[0.00]	ug/L	14:57:40
2	Ni 231.604†	103.2	103.6	[0.00]	ug/L	14:57:40
2	P 214.914†	230.2	231.1	[0.00]	ug/L	14:57:40
2	Pb 220.353†	-71.4	-71.7	[0.00]	ug/L	14:57:40
2	S 181.975 Axial†	43.5	43.7	[0.00]	ug/L	14:57:40
2	Sb 206.836†	43.7	43.9	[0.00]	ug/L	14:57:40
2	Se 196.026†	-41.1	-41.3	[0.00]	ug/L	14:57:40
2	Si 251.611†	501.1	503.2	[0.00]	ug/L	14:57:40
2	Sn 189.927†	9.1	9.2	[0.00]	ug/L	14:57:40
2	Ti 334.940†	-1389.0	-1394.7	[0.00]	ug/L	14:57:20
2	Tl 190.801†	-36.3	-36.5	[0.00]	ug/L	14:57:40
2	U 409.014†	-1484.4	-1490.5	[0.00]	ug/L	14:57:15
2	V 292.402†	-1468.3	-1474.3	[0.00]	ug/L	14:57:20
2	Zn 213.857†	705.9	708.8	[0.00]	ug/L	14:57:40
2	SiO2†	515.5	517.6	[0.00]	ug/L	14:58:21
3	Sc Radial	5329.2	5329.2	100	%	14:56:18
3	Y RADIAL	5653.5	5653.5	100.2	%	14:56:18

3	Al 396.153Radial†	15.2	15.2	[0.00] ug/L	14:56:18
3	Ca 317.933Radial†	22.9	22.9	[0.00] ug/L	14:56:38
3	Fe 238.204 Radial†	13.2	13.2	[0.00] ug/L	14:56:38
3	K 766.490 Radial†	2593.2	2592.2	[0.00] ug/L	14:56:18
3	Mg 279.077 IEC†	2.9	2.9	[0.00] ug/L	14:56:38
3	Na 589.592 Radial†	-1110.2	-1109.8	[0.00] ug/L	14:56:18
3	Sr 421.552†	7.3	7.3	[0.00] ug/L	14:56:18
3	Sc 361.383	944268.1	944268.1	100.01 %	14:57:45
3	Y 371.029	798344.2	798344.2	100.12 %	14:57:45
3	Ag 328.068†	375.2	375.2	[0.00] ug/L	14:57:50
3	As 188.979†	-19.5	-19.5	[0.00] ug/L	14:58:11
3	B 249.677†	-501.5	-501.5	[0.00] ug/L	14:58:11
3	Ba 233.527†	14.3	14.3	[0.00] ug/L	14:58:11
3	Be 313.107†	-4520.1	-4519.6	[0.00] ug/L	14:57:50
3	Cd 226.502†	-224.7	-224.6	[0.00] ug/L	14:58:11
3	Co 228.616†	-59.2	-59.2	[0.00] ug/L	14:58:11
3	Cr 267.716†	88.0	88.0	[0.00] ug/L	14:58:11
3	Cu 324.752†	6157.1	6156.3	[0.00] ug/L	14:57:50
3	Mn 257.610†	467.4	467.3	[0.00] ug/L	14:58:11
3	Mo 202.031†	19.8	19.8	[0.00] ug/L	14:58:11
3	Ni 231.604†	98.0	98.0	[0.00] ug/L	14:58:11
3	P 214.914†	235.6	235.6	[0.00] ug/L	14:58:11
3	Pb 220.353†	-48.9	-48.9	[0.00] ug/L	14:58:11
3	S 181.975 Axial†	39.9	39.9	[0.00] ug/L	14:58:11
3	Sb 206.836†	34.1	34.0	[0.00] ug/L	14:58:11
3	Se 196.026†	-29.7	-29.7	[0.00] ug/L	14:58:11
3	Si 251.611†	495.8	495.8	[0.00] ug/L	14:58:11
3	Sn 189.927†	6.3	6.3	[0.00] ug/L	14:58:11
3	Ti 334.940†	-1372.1	-1371.9	[0.00] ug/L	14:57:50
3	Tl 190.801†	-44.0	-44.0	[0.00] ug/L	14:58:11
3	U 409.014†	-1671.9	-1671.7	[0.00] ug/L	14:57:45
3	V 292.402†	-1524.6	-1524.5	[0.00] ug/L	14:57:50
3	Zn 213.857†	715.9	715.8	[0.00] ug/L	14:58:11
3	SiO2†	520.7	520.6	[0.00] ug/L	14:58:26

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	944149.5	3752.01	0.40%	100.00	%
Sc Radial	5327.1	34.50	0.65%	100	%
Y 371.029	797369.9	3246.87	0.41%	100.00	%
Y RADIAL	5644.9	12.30	0.22%	100.0	%
Ag 328.068†	411.2	64.62	15.72%	[0.00]	ug/L
Al 396.153Radial†	4.6	9.11	196.25%	[0.00]	ug/L
As 188.979†	-19.6	2.57	13.11%	[0.00]	ug/L
B 249.677†	-527.5	22.80	4.32%	[0.00]	ug/L
Ba 233.527†	19.7	5.15	26.12%	[0.00]	ug/L
Be 313.107†	-4530.8	10.09	0.22%	[0.00]	ug/L
Ca 317.933Radial†	20.6	3.10	15.06%	[0.00]	ug/L
Cd 226.502†	-216.9	6.97	3.22%	[0.00]	ug/L
Co 228.616†	-73.4	14.39	19.61%	[0.00]	ug/L
Cr 267.716†	80.1	9.51	11.88%	[0.00]	ug/L
Cu 324.752†	6166.5	8.88	0.14%	[0.00]	ug/L
Fe 238.204 Radial†	12.8	0.42	3.31%	[0.00]	ug/L
K 766.490 Radial†	2675.5	74.35	2.78%	[0.00]	ug/L
Mg 279.077 IEC†	2.6	0.35	13.26%	[0.00]	ug/L
Mn 257.610†	455.6	11.18	2.45%	[0.00]	ug/L
Mo 202.031†	18.8	2.43	12.94%	[0.00]	ug/L
Na 589.592 Radial†	-1098.7	32.35	2.94%	[0.00]	ug/L
Ni 231.604†	100.5	2.83	2.82%	[0.00]	ug/L
P 214.914†	234.6	3.05	1.30%	[0.00]	ug/L
Pb 220.353†	-53.7	16.08	29.93%	[0.00]	ug/L
S 181.975 Axial†	41.5	1.97	4.76%	[0.00]	ug/L
Sb 206.836†	38.7	4.95	12.79%	[0.00]	ug/L
Se 196.026†	-32.9	7.30	22.18%	[0.00]	ug/L
Si 251.611†	497.1	5.49	1.10%	[0.00]	ug/L
Sn 189.927†	7.5	1.49	19.96%	[0.00]	ug/L
Sr 421.552†	11.7	6.62	56.73%	[0.00]	ug/L
Ti 334.940†	-1388.8	14.87	1.07%	[0.00]	ug/L
Tl 190.801†	-38.7	4.56	11.76%	[0.00]	ug/L

U 409.014†	-1644.9	142.95	8.69%	[0.00]	ug/L
V 292.402†	-1477.5	45.35	3.07%	[0.00]	ug/L
Zn 213.857†	707.7	8.69	1.23%	[0.00]	ug/L
SiO2†	525.0	10.25	1.95%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/18/2010 15:00:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5352.1	5352.1	100	%	15:02:34
1	Y RADIAL	5652.6	5652.6	100.1	%	15:02:34
1	K 766.490 Radial†	7336.7	4627.1	[1000]	ug/L	15:02:29
1	Sr 421.552†	15971.2	15885.0	[100]	ug/L	15:02:34
1	Sc 361.383	934037.5	934037.5	98.929	%	15:03:01
1	Y 371.029	792820.6	792820.6	99.429	%	15:03:01
1	Ag 328.068†	22820.5	22656.3	[100]	ug/L	15:03:01
1	As 188.979†	216.2	238.2	[100]	ug/L	15:03:21
1	B 249.677†	3797.0	4365.7	[100]	ug/L	15:03:01
1	Ba 233.527†	13554.4	13681.4	[100]	ug/L	15:03:01
1	Be 313.107†	272866.3	280351.1	[100]	ug/L	15:03:01
1	Cd 226.502†	9054.0	9368.9	[100]	ug/L	15:03:01
1	Co 228.616†	4891.9	5018.3	[100]	ug/L	15:03:21
1	Cr 267.716†	9031.1	9048.8	[100]	ug/L	15:03:01
1	Cu 324.752†	39878.3	34143.6	[100]	ug/L	15:03:01
1	Mn 257.610†	95153.8	95728.3	[100]	ug/L	15:03:01
1	Mo 202.031†	1490.8	1488.1	[100]	ug/L	15:03:21
1	Ni 231.604†	4123.2	4067.3	[100]	ug/L	15:03:21
1	P 214.914†	1073.4	850.5	[500]	ug/L	15:03:21
1	Pb 220.353†	794.5	856.9	[100]	ug/L	15:03:21
1	S 181.975 Axial†	189.3	149.8	[200]	ug/L	15:03:21
1	Sb 206.836†	328.6	293.5	[100]	ug/L	15:03:21
1	Se 196.026†	128.2	162.5	[100]	ug/L	15:03:21
1	Si 251.611†	16541.2	16223.1	[500]	ug/L	15:03:01
1	Sn 189.927†	582.5	581.4	[100]	ug/L	15:03:21
1	Ti 334.940†	63539.8	65616.5	[100]	ug/L	15:03:01
1	Tl 190.801†	298.7	340.6	[100]	ug/L	15:03:21
1	U 409.014†	1707.8	3371.2	[100]	ug/L	15:03:01
1	V 292.402†	13240.0	14860.9	[100]	ug/L	15:03:01
1	Zn 213.857†	11707.7	11126.8	[100]	ug/L	15:03:01
1	SiO2†	16457.1	16110.3	[1069.5]	ug/L	15:04:17
2	Sc Radial	6012.0	6012.0	113	%	15:02:44
2	Y RADIAL	6337.1	6337.1	112.3	%	15:02:44
2	K 766.490 Radial†	7413.9	3893.9	[1000]	ug/L	15:02:39
2	Sr 421.552†	15384.3	13620.1	[100]	ug/L	15:02:44
2	Sc 361.383	901893.7	901893.7	95.524	%	15:03:26
2	Y 371.029	762893.3	762893.3	95.676	%	15:03:26
2	Ag 328.068†	22613.3	23261.6	[100]	ug/L	15:03:26
2	As 188.979†	214.3	243.9	[100]	ug/L	15:03:46
2	B 249.677†	3851.3	4559.2	[100]	ug/L	15:03:26
2	Ba 233.527†	13511.4	14124.8	[100]	ug/L	15:03:26
2	Be 313.107†	271285.0	288526.1	[100]	ug/L	15:03:26
2	Cd 226.502†	8977.3	9614.7	[100]	ug/L	15:03:26
2	Co 228.616†	4892.6	5195.3	[100]	ug/L	15:03:46
2	Cr 267.716†	9067.3	9412.1	[100]	ug/L	15:03:26
2	Cu 324.752†	39488.4	35172.0	[100]	ug/L	15:03:26
2	Mn 257.610†	94839.9	98827.8	[100]	ug/L	15:03:26
2	Mo 202.031†	1488.9	1539.9	[100]	ug/L	15:03:46
2	Ni 231.604†	4115.4	4207.7	[100]	ug/L	15:03:46
2	P 214.914†	1063.7	878.9	[500]	ug/L	15:03:46
2	Pb 220.353†	785.6	876.1	[100]	ug/L	15:03:46
2	S 181.975 Axial†	184.1	151.2	[200]	ug/L	15:03:46
2	Sb 206.836†	319.9	296.2	[100]	ug/L	15:03:46
2	Se 196.026†	131.3	170.4	[100]	ug/L	15:03:46
2	Si 251.611†	16400.2	16671.5	[500]	ug/L	15:03:26
2	Sn 189.927†	593.1	613.4	[100]	ug/L	15:03:46
2	Ti 334.940†	63429.7	67790.3	[100]	ug/L	15:03:26
2	Tl 190.801†	309.0	362.2	[100]	ug/L	15:03:46
2	U 409.014†	1611.9	3332.3	[100]	ug/L	15:03:26

2	V 292.402†	13296.8	15397.3	[100]	ug/L	15:03:26
2	Zn 213.857†	11615.4	11451.9	[100]	ug/L	15:03:26
2	SiO2†	16405.7	16649.4	[1069.5]	ug/L	15:04:22
3	Sc Radial	5573.4	5573.4	105	%	15:02:54
3	Y RADIAL	5898.4	5898.4	104.5	%	15:02:54
3	K 766.490 Radial†	7225.0	4230.3	[1000]	ug/L	15:02:49
3	Sr 421.552†	15272.4	14586.0	[100]	ug/L	15:02:54
3	Sc 361.383	900641.8	900641.8	95.392	%	15:03:52
3	Y 371.029	762930.1	762930.1	95.681	%	15:03:52
3	Ag 328.068†	22447.5	23120.6	[100]	ug/L	15:03:52
3	As 188.979†	213.3	243.2	[100]	ug/L	15:04:12
3	B 249.677†	3787.2	4497.7	[100]	ug/L	15:03:52
3	Ba 233.527†	13436.3	14065.7	[100]	ug/L	15:03:52
3	Be 313.107†	269883.0	287451.1	[100]	ug/L	15:03:52
3	Cd 226.502†	8936.1	9584.6	[100]	ug/L	15:03:52
3	Co 228.616†	4884.7	5194.1	[100]	ug/L	15:04:12
3	Cr 267.716†	8973.8	9327.3	[100]	ug/L	15:03:52
3	Cu 324.752†	39244.4	34973.7	[100]	ug/L	15:03:52
3	Mn 257.610†	94303.5	98403.4	[100]	ug/L	15:03:52
3	Mo 202.031†	1490.8	1544.0	[100]	ug/L	15:04:12
3	Ni 231.604†	4095.6	4192.9	[100]	ug/L	15:04:12
3	P 214.914†	1058.8	875.4	[500]	ug/L	15:04:12
3	Pb 220.353†	788.0	879.9	[100]	ug/L	15:04:12
3	S 181.975 Axial†	187.0	154.5	[200]	ug/L	15:04:12
3	Sb 206.836†	328.3	305.4	[100]	ug/L	15:04:12
3	Se 196.026†	123.2	162.0	[100]	ug/L	15:04:12
3	Si 251.611†	16349.3	16641.9	[500]	ug/L	15:03:52
3	Sn 189.927†	586.2	607.0	[100]	ug/L	15:04:12
3	Ti 334.940†	62946.7	67376.3	[100]	ug/L	15:03:52
3	Tl 190.801†	304.2	357.6	[100]	ug/L	15:04:12
3	U 409.014†	1656.5	3381.4	[100]	ug/L	15:03:52
3	V 292.402†	13196.4	15311.4	[100]	ug/L	15:03:52
3	Zn 213.857†	11553.3	11403.7	[100]	ug/L	15:03:52
3	SiO2†	16766.0	17051.0	[1069.5]	ug/L	15:04:27

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	912191.0	18929.97	2.08%	96.615	%
Sc Radial	5645.8	335.87	5.95%	106	%
Y 371.029	772881.3	17267.92	2.23%	96.929	%
Y RADIAL	5962.7	346.75	5.82%	105.6	%
Ag 328.068†	23012.8	316.68	1.38%	[100]	ug/L
As 188.979†	241.8	3.13	1.29%	[100]	ug/L
B 249.677†	4474.2	98.91	2.21%	[100]	ug/L
Ba 233.527†	13957.3	240.74	1.72%	[100]	ug/L
Be 313.107†	285442.8	4442.12	1.56%	[100]	ug/L
Cd 226.502†	9522.7	134.10	1.41%	[100]	ug/L
Co 228.616†	5135.9	101.83	1.98%	[100]	ug/L
Cr 267.716†	9262.7	190.05	2.05%	[100]	ug/L
Cu 324.752†	34763.1	545.60	1.57%	[100]	ug/L
K 766.490 Radial†	4250.4	367.00	8.63%	[1000]	ug/L
Mn 257.610†	97653.2	1680.43	1.72%	[100]	ug/L
Mo 202.031†	1524.0	31.14	2.04%	[100]	ug/L
Ni 231.604†	4156.0	77.14	1.86%	[100]	ug/L
P 214.914†	868.3	15.49	1.78%	[500]	ug/L
Pb 220.353†	871.0	12.32	1.41%	[100]	ug/L
S 181.975 Axial†	151.8	2.40	1.58%	[200]	ug/L
Sb 206.836†	298.4	6.24	2.09%	[100]	ug/L
Se 196.026†	165.0	4.70	2.85%	[100]	ug/L
Si 251.611†	16512.2	250.75	1.52%	[500]	ug/L
Sn 189.927†	600.6	16.93	2.82%	[100]	ug/L
Sr 421.552†	14697.0	1136.56	7.73%	[100]	ug/L
Ti 334.940†	66927.7	1154.25	1.72%	[100]	ug/L
Tl 190.801†	353.5	11.36	3.21%	[100]	ug/L
U 409.014†	3361.6	25.92	0.77%	[100]	ug/L
V 292.402†	15189.9	288.12	1.90%	[100]	ug/L
Zn 213.857†	11327.5	175.45	1.55%	[100]	ug/L
SiO2†	16603.5	472.02	2.84%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 1/18/2010 15:06:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	4897.6	4897.6	91.9	%	15:08:30
1	Y RADIAL	5113.6	5113.6	90.59	%	15:08:30
1	Al 396.153Radial†	6215.8	6756.2	[5000]	ug/L	15:08:30
1	Ca 317.933Radial†	3016.9	3260.9	[5000]	ug/L	15:08:50
1	K 766.490 Radial†	26023.3	25629.9	[5000]	ug/L	15:08:30
1	Mg 279.077 IEC†	158.5	169.7	[5000]	ug/L	15:08:50
1	Sr 421.552†	78224.9	85073.0	[500]	ug/L	15:08:30
1	Sc 361.383	921445.8	921445.8	97.595	%	15:09:48
1	Y 371.029	769103.7	769103.7	96.455	%	15:09:48
1	Ag 328.068†	112214.3	114568.0	[500]	ug/L	15:09:53
1	As 188.979†	1182.3	1231.0	[500]	ug/L	15:10:13
1	B 249.677†	22161.4	23234.9	[500]	ug/L	15:09:53
1	Ba 233.527†	67422.6	69064.2	[500]	ug/L	15:09:53
1	Be 313.107†	1370143.7	1408433.7	[500]	ug/L	15:09:48
1	Cd 226.502†	46019.4	47370.1	[500]	ug/L	15:09:53
1	Co 228.616†	25260.4	25956.2	[500]	ug/L	15:09:53
1	Cr 267.716†	45065.9	46096.2	[500]	ug/L	15:09:53
1	Cu 324.752†	174646.4	172783.1	[500]	ug/L	15:09:53
1	Mn 257.610†	460376.0	471263.7	[500]	ug/L	15:09:48
1	Mo 202.031†	7258.5	7418.5	[500]	ug/L	15:10:13
1	Ni 231.604†	20579.5	20986.0	[500]	ug/L	15:09:53
1	P 214.914†	4458.4	4333.7	[2500]	ug/L	15:10:13
1	Pb 220.353†	4088.0	4242.5	[500]	ug/L	15:10:13
1	S 181.975 Axial†	768.8	746.2	[1000]	ug/L	15:10:13
1	Sb 206.836†	1500.9	1499.1	[500]	ug/L	15:10:13
1	Se 196.026†	771.4	823.3	[500]	ug/L	15:10:13
1	Si 251.611†	82356.6	83888.7	[2500]	ug/L	15:09:53
1	Sn 189.927†	2907.1	2971.3	[500]	ug/L	15:10:13
1	Ti 334.940†	318097.8	327324.2	[500]	ug/L	15:09:53
1	Tl 190.801†	1665.2	1745.0	[500]	ug/L	15:10:13
1	U 409.014†	15698.3	17730.0	[500]	ug/L	15:09:53
1	V 292.402†	73374.7	76660.2	[500]	ug/L	15:09:53
1	Zn 213.857†	55576.2	56237.8	[500]	ug/L	15:09:53
1	SiO2†	82176.0	83675.8	[5347.5]	ug/L	15:11:20
2	Sc Radial	5239.9	5239.9	98.4	%	15:08:55
2	Y RADIAL	5495.5	5495.5	97.35	%	15:08:55
2	Al 396.153Radial†	6053.8	6150.0	[5000]	ug/L	15:08:55
2	Ca 317.933Radial†	2989.6	3018.8	[5000]	ug/L	15:09:15
2	K 766.490 Radial†	25304.5	23050.5	[5000]	ug/L	15:08:55
2	Mg 279.077 IEC†	154.9	154.9	[5000]	ug/L	15:09:15
2	Sr 421.552†	76392.2	77653.0	[500]	ug/L	15:08:55
2	Sc 361.383	938507.3	938507.3	99.402	%	15:10:19
2	Y 371.029	781177.4	781177.4	97.969	%	15:10:19
2	Ag 328.068†	110878.7	111134.1	[500]	ug/L	15:10:24
2	As 188.979†	1191.2	1217.9	[500]	ug/L	15:10:44
2	B 249.677†	21773.7	22432.1	[500]	ug/L	15:10:24
2	Ba 233.527†	66954.3	67337.1	[500]	ug/L	15:10:24
2	Be 313.107†	1395347.8	1408267.2	[500]	ug/L	15:10:19
2	Cd 226.502†	45685.6	46177.1	[500]	ug/L	15:10:24
2	Co 228.616†	25029.4	25253.3	[500]	ug/L	15:10:24
2	Cr 267.716†	44686.9	44875.5	[500]	ug/L	15:10:24
2	Cu 324.752†	172046.6	166914.4	[500]	ug/L	15:10:24
2	Mn 257.610†	469738.0	472106.4	[500]	ug/L	15:10:19
2	Mo 202.031†	7300.4	7325.5	[500]	ug/L	15:10:44
2	Ni 231.604†	20367.3	20389.2	[500]	ug/L	15:10:24
2	P 214.914†	4495.2	4287.7	[2500]	ug/L	15:10:44
2	Pb 220.353†	4128.1	4206.6	[500]	ug/L	15:10:44
2	S 181.975 Axial†	777.2	740.3	[1000]	ug/L	15:10:44
2	Sb 206.836†	1526.8	1497.3	[500]	ug/L	15:10:44

2	Se 196.026†	777.3	814.9	[500]	ug/L	15:10:44
2	Si 251.611†	81413.1	81405.4	[2500]	ug/L	15:10:24
2	Sn 189.927†	2916.9	2927.0	[500]	ug/L	15:10:44
2	Ti 334.940†	314908.4	318190.4	[500]	ug/L	15:10:24
2	Tl 190.801†	1672.7	1721.5	[500]	ug/L	15:10:44
2	U 409.014†	15357.8	17095.1	[500]	ug/L	15:10:24
2	V 292.402†	72575.6	74489.5	[500]	ug/L	15:10:24
2	Zn 213.857†	55017.6	54640.6	[500]	ug/L	15:10:24
2	SiO2†	81899.9	81867.3	[5347.5]	ug/L	15:11:25
3	Sc Radial	5224.7	5224.7	98.1	%	15:09:20
3	Y RADIAL	5518.7	5518.7	97.76	%	15:09:20
3	Al 396.153Radial†	6084.9	6199.7	[5000]	ug/L	15:09:20
3	Ca 317.933Radial†	3009.0	3047.4	[5000]	ug/L	15:09:40
3	K 766.490 Radial†	25464.5	23288.5	[5000]	ug/L	15:09:20
3	Mg 279.077 IEC†	159.9	160.4	[5000]	ug/L	15:09:40
3	Sr 421.552†	76366.7	77852.8	[500]	ug/L	15:09:20
3	Sc 361.383	939116.4	939116.4	99.467	%	15:10:49
3	Y 371.029	782036.6	782036.6	98.077	%	15:10:49
3	Ag 328.068†	110940.5	111123.9	[500]	ug/L	15:10:55
3	As 188.979†	1193.5	1219.5	[500]	ug/L	15:11:15
3	B 249.677†	21855.3	22500.0	[500]	ug/L	15:10:55
3	Ba 233.527†	66973.7	67313.0	[500]	ug/L	15:10:55
3	Be 313.107†	1393055.1	1405051.8	[500]	ug/L	15:10:49
3	Cd 226.502†	45678.8	46140.5	[500]	ug/L	15:10:55
3	Co 228.616†	25056.7	25264.4	[500]	ug/L	15:10:55
3	Cr 267.716†	44784.0	44943.9	[500]	ug/L	15:10:55
3	Cu 324.752†	172318.5	167075.6	[500]	ug/L	15:10:55
3	Mn 257.610†	468905.1	470962.6	[500]	ug/L	15:10:49
3	Mo 202.031†	7337.2	7357.8	[500]	ug/L	15:11:15
3	Ni 231.604†	20448.0	20457.1	[500]	ug/L	15:10:55
3	P 214.914†	4486.1	4275.6	[2500]	ug/L	15:11:15
3	Pb 220.353†	4144.2	4220.1	[500]	ug/L	15:11:15
3	S 181.975 Axial†	775.9	738.6	[1000]	ug/L	15:11:15
3	Sb 206.836†	1532.0	1501.5	[500]	ug/L	15:11:15
3	Se 196.026†	782.4	819.5	[500]	ug/L	15:11:15
3	Si 251.611†	81489.9	81429.5	[2500]	ug/L	15:10:55
3	Sn 189.927†	2945.8	2954.1	[500]	ug/L	15:11:15
3	Ti 334.940†	315201.1	318279.2	[500]	ug/L	15:10:55
3	Tl 190.801†	1673.1	1720.8	[500]	ug/L	15:11:15
3	U 409.014†	15352.5	17079.7	[500]	ug/L	15:10:55
3	V 292.402†	72583.5	74450.1	[500]	ug/L	15:10:55
3	Zn 213.857†	55103.3	54690.9	[500]	ug/L	15:10:55
3	SiO2†	80861.9	80770.3	[5347.5]	ug/L	15:11:30

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	933023.1	10030.94	1.08%	98.822	%
Sc Radial	5120.7	193.34	3.78%	96.1	%
Y 371.029	777439.2	7231.55	0.93%	97.500	%
Y RADIAL	5375.9	227.49	4.23%	95.24	%
Ag 328.068†	112275.3	1985.52	1.77%	[500]	ug/L
Al 396.153Radial†	6368.6	336.57	5.28%	[5000]	ug/L
As 188.979†	1222.8	7.14	0.58%	[500]	ug/L
B 249.677†	22722.3	445.23	1.96%	[500]	ug/L
Ba 233.527†	67904.7	1004.16	1.48%	[500]	ug/L
Be 313.107†	1407250.9	1906.30	0.14%	[500]	ug/L
Ca 317.933Radial†	3109.0	132.30	4.26%	[5000]	ug/L
Cd 226.502†	46562.6	699.61	1.50%	[500]	ug/L
Co 228.616†	25491.3	402.66	1.58%	[500]	ug/L
Cr 267.716†	45305.2	685.88	1.51%	[500]	ug/L
Cu 324.752†	168924.4	3342.75	1.98%	[500]	ug/L
K 766.490 Radial†	23989.6	1425.48	5.94%	[5000]	ug/L
Mg 279.077 IEC†	161.7	7.49	4.63%	[5000]	ug/L
Mn 257.610†	471444.3	592.91	0.13%	[500]	ug/L
Mo 202.031†	7367.3	47.22	0.64%	[500]	ug/L
Ni 231.604†	20610.8	326.76	1.59%	[500]	ug/L
P 214.914†	4299.0	30.68	0.71%	[2500]	ug/L
Pb 220.353†	4223.1	18.09	0.43%	[500]	ug/L
S 181.975 Axial†	741.7	4.01	0.54%	[1000]	ug/L

Sb 206.836†	1499.3	2.11	0.14%	[500]	ug/L
Se 196.026†	819.2	4.25	0.52%	[500]	ug/L
Si 251.611†	82241.2	1426.82	1.73%	[2500]	ug/L
Sn 189.927†	2950.8	22.32	0.76%	[500]	ug/L
Sr 421.552†	80192.9	4227.44	5.27%	[500]	ug/L
Ti 334.940†	321264.6	5247.96	1.63%	[500]	ug/L
Tl 190.801†	1729.1	13.75	0.80%	[500]	ug/L
U 409.014†	17301.6	371.09	2.14%	[500]	ug/L
V 292.402†	75199.9	1264.79	1.68%	[500]	ug/L
Zn 213.857†	55189.8	907.97	1.65%	[500]	ug/L
SiO2†	82104.4	1467.19	1.79%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 1/18/2010 15:13:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5203.5	5203.5	97.7	%	15:15:54
1	Y RADIAL	5437.9	5437.9	96.33	%	15:15:54
1	Al 396.153Radial†	12260.0	12546.6	[10000]	ug/L	15:15:34
1	Ca 317.933Radial†	5887.2	6006.4	[10000]	ug/L	15:15:54
1	Fe 238.204 Radial†	1119.5	1133.3	[10000]	ug/L	15:15:54
1	K 766.490 Radial†	48507.6	46984.5	[10000]	ug/L	15:15:34
1	Mg 279.077 IEC†	304.1	308.6	[10000]	ug/L	15:15:54
1	Na 589.592 Radial†	33827.4	35729.6	[10000]	ug/L	15:15:34
1	Sr 421.552†	151541.0	155129.1	[1000]	ug/L	15:15:34
1	Sc 361.383	915911.5	915911.5	97.009	%	15:16:52
1	Y 371.029	752773.7	752773.7	94.407	%	15:16:58
1	Ag 328.068†	223040.1	229505.3	[1000]	ug/L	15:16:58
1	As 188.979†	2397.2	2490.7	[1000]	ug/L	15:17:18
1	B 249.677†	44617.5	46520.6	[1000]	ug/L	15:16:58
1	Ba 233.527†	133603.5	137702.8	[1000]	ug/L	15:16:58
1	Be 313.107†	2747722.2	2836966.3	[1000]	ug/L	15:16:52
1	Cd 226.502†	91242.6	94272.5	[1000]	ug/L	15:16:58
1	Co 228.616†	50004.7	51619.8	[1000]	ug/L	15:16:58
1	Cr 267.716†	89425.8	92102.8	[1000]	ug/L	15:16:58
1	Cu 324.752†	342136.6	346518.3	[1000]	ug/L	15:16:58
1	Mn 257.610†	919855.2	947759.1	[1000]	ug/L	15:16:52
1	Mo 202.031†	14592.5	15023.6	[1000]	ug/L	15:17:18
1	Ni 231.604†	40609.4	41760.9	[1000]	ug/L	15:16:58
1	P 214.914†	8756.2	8791.5	[5000]	ug/L	15:17:18
1	Pb 220.353†	8289.7	8599.1	[1000]	ug/L	15:17:18
1	S 181.975 Axial†	1511.3	1516.3	[2000]	ug/L	15:17:18
1	Sb 206.836†	3014.8	3069.0	[1000]	ug/L	15:17:18
1	Se 196.026†	1560.8	1641.8	[1000]	ug/L	15:17:18
1	Si 251.611†	162012.1	166509.9	[5000]	ug/L	15:16:58
1	Sn 189.927†	5865.2	6038.5	[1000]	ug/L	15:17:18
1	Ti 334.940†	645744.6	667041.9	[1000]	ug/L	15:16:52
1	Tl 190.801†	3356.1	3498.3	[1000]	ug/L	15:17:18
1	U 409.014†	33076.3	35741.0	[1000]	ug/L	15:16:58
1	V 292.402†	147427.3	153450.1	[1000]	ug/L	15:16:58
1	Zn 213.857†	109147.6	111805.0	[1000]	ug/L	15:16:58
1	SiO2†	160304.4	164721.7	[10695]	ug/L	15:18:28
2	Sc Radial	5196.1	5196.1	97.5	%	15:16:19
2	Y RADIAL	5436.1	5436.1	96.30	%	15:16:19
2	Al 396.153Radial†	12203.4	12506.4	[10000]	ug/L	15:15:59
2	Ca 317.933Radial†	5940.0	6069.2	[10000]	ug/L	15:16:19
2	Fe 238.204 Radial†	1131.7	1147.4	[10000]	ug/L	15:16:19
2	K 766.490 Radial†	48419.1	46964.3	[10000]	ug/L	15:15:59
2	Mg 279.077 IEC†	304.9	310.0	[10000]	ug/L	15:16:19
2	Na 589.592 Radial†	33608.1	35554.0	[10000]	ug/L	15:15:59
2	Sr 421.552†	151120.2	154918.1	[1000]	ug/L	15:15:59
2	Sc 361.383	917548.4	917548.4	97.183	%	15:17:25
2	Y 371.029	754089.6	754089.6	94.572	%	15:17:30
2	Ag 328.068†	222902.8	228953.9	[1000]	ug/L	15:17:30
2	As 188.979†	2382.5	2471.2	[1000]	ug/L	15:17:50
2	B 249.677†	44597.9	46418.4	[1000]	ug/L	15:17:30
2	Ba 233.527†	133521.0	137372.3	[1000]	ug/L	15:17:30
2	Be 313.107†	2746906.3	2831073.8	[1000]	ug/L	15:17:25
2	Cd 226.502†	91284.3	94147.7	[1000]	ug/L	15:17:30
2	Co 228.616†	49980.7	51503.1	[1000]	ug/L	15:17:30
2	Cr 267.716†	89400.8	91912.6	[1000]	ug/L	15:17:30
2	Cu 324.752†	341807.0	345550.0	[1000]	ug/L	15:17:30
2	Mn 257.610†	921393.0	947650.0	[1000]	ug/L	15:17:25
2	Mo 202.031†	14630.7	15036.0	[1000]	ug/L	15:17:50
2	Ni 231.604†	40564.6	41640.0	[1000]	ug/L	15:17:30

2	P 214.914†	8762.4	8781.8	[5000]	ug/L	15:17:50
2	Pb 220.353†	8278.6	8572.4	[1000]	ug/L	15:17:50
2	S 181.975 Axial†	1489.9	1491.6	[2000]	ug/L	15:17:50
2	Sb 206.836†	3016.2	3065.0	[1000]	ug/L	15:17:50
2	Se 196.026†	1558.4	1636.5	[1000]	ug/L	15:17:50
2	Si 251.611†	161767.0	165959.7	[5000]	ug/L	15:17:30
2	Sn 189.927†	5866.1	6028.7	[1000]	ug/L	15:17:50
2	Ti 334.940†	646653.2	666789.4	[1000]	ug/L	15:17:25
2	Tl 190.801†	3331.1	3466.5	[1000]	ug/L	15:17:50
2	U 409.014†	33006.9	35608.8	[1000]	ug/L	15:17:30
2	V 292.402†	147162.8	152906.8	[1000]	ug/L	15:17:30
2	Zn 213.857†	109063.2	111517.4	[1000]	ug/L	15:17:30
2	SiO2†	161529.1	165687.1	[10695]	ug/L	15:18:33
3	Sc Radial	5114.0	5114.0	96.0	%	15:16:44
3	Y RADIAL	5353.1	5353.1	94.83	%	15:16:44
3	Al 396.153Radial†	12161.8	12664.1	[10000]	ug/L	15:16:24
3	Ca 317.933Radial†	5914.1	6140.0	[10000]	ug/L	15:16:44
3	Fe 238.204 Radial†	1128.3	1162.5	[10000]	ug/L	15:16:44
3	K 766.490 Radial†	48173.5	47505.9	[10000]	ug/L	15:16:24
3	Mg 279.077 IEC†	302.3	312.3	[10000]	ug/L	15:16:44
3	Na 589.592 Radial†	33131.0	35610.6	[10000]	ug/L	15:16:24
3	Sr 421.552†	149653.2	155879.3	[1000]	ug/L	15:16:24
3	Sc 361.383	928982.8	928982.8	98.394	%	15:17:57
3	Y 371.029	757016.4	757016.4	94.939	%	15:18:02
3	Ag 328.068†	222792.7	226018.9	[1000]	ug/L	15:18:02
3	As 188.979†	2366.9	2425.1	[1000]	ug/L	15:18:22
3	B 249.677†	44601.8	45857.5	[1000]	ug/L	15:18:02
3	Ba 233.527†	133745.5	135909.4	[1000]	ug/L	15:18:02
3	Be 313.107†	2767693.9	2817410.1	[1000]	ug/L	15:17:57
3	Cd 226.502†	91246.0	92952.5	[1000]	ug/L	15:18:02
3	Co 228.616†	49924.6	50813.1	[1000]	ug/L	15:18:02
3	Cr 267.716†	89343.3	90721.8	[1000]	ug/L	15:18:02
3	Cu 324.752†	341697.6	341109.7	[1000]	ug/L	15:18:02
3	Mn 257.610†	924944.5	939589.6	[1000]	ug/L	15:17:57
3	Mo 202.031†	14499.7	14717.6	[1000]	ug/L	15:18:22
3	Ni 231.604†	40543.8	41105.2	[1000]	ug/L	15:18:02
3	P 214.914†	8663.6	8570.5	[5000]	ug/L	15:18:22
3	Pb 220.353†	8202.3	8389.9	[1000]	ug/L	15:18:22
3	S 181.975 Axial†	1490.7	1473.5	[2000]	ug/L	15:18:22
3	Sb 206.836†	2996.3	3006.5	[1000]	ug/L	15:18:22
3	Se 196.026†	1549.4	1607.6	[1000]	ug/L	15:18:22
3	Si 251.611†	161822.4	163967.2	[5000]	ug/L	15:18:02
3	Sn 189.927†	5821.4	5908.9	[1000]	ug/L	15:18:22
3	Ti 334.940†	650180.8	662184.4	[1000]	ug/L	15:17:57
3	Tl 190.801†	3321.7	3414.7	[1000]	ug/L	15:18:22
3	U 409.014†	32989.1	35172.6	[1000]	ug/L	15:18:02
3	V 292.402†	147366.2	151249.6	[1000]	ug/L	15:18:02
3	Zn 213.857†	108985.8	110057.5	[1000]	ug/L	15:18:02
3	SiO2†	159063.0	161134.9	[10695]	ug/L	15:18:38

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	920814.3	7121.39	0.77%	97.528	%
Sc Radial	5171.2	49.71	0.96%	97.1	%
Y 371.029	754626.6	2171.73	0.29%	94.639	%
Y RADIAL	5409.0	48.43	0.90%	95.82	%
Ag 328.068†	228159.4	1874.12	0.82%	[1000]	ug/L
Al 396.153Radial†	12572.4	81.92	0.65%	[10000]	ug/L
As 188.979†	2462.3	33.66	1.37%	[1000]	ug/L
B 249.677†	46265.5	357.03	0.77%	[1000]	ug/L
Ba 233.527†	136994.8	954.45	0.70%	[1000]	ug/L
Be 313.107†	2828483.4	10032.13	0.35%	[1000]	ug/L
Ca 317.933Radial†	6071.9	66.84	1.10%	[10000]	ug/L
Cd 226.502†	93790.9	728.74	0.78%	[1000]	ug/L
Co 228.616†	51312.0	436.00	0.85%	[1000]	ug/L
Cr 267.716†	91579.1	748.46	0.82%	[1000]	ug/L
Cu 324.752†	344392.7	2884.10	0.84%	[1000]	ug/L
Fe 238.204 Radial†	1147.7	14.62	1.27%	[10000]	ug/L
K 766.490 Radial†	47151.6	307.07	0.65%	[10000]	ug/L

Mg 279.077 IEC†	310.3	1.83	0.59%	[10000]	ug/L
Mn 257.610†	944999.6	4685.48	0.50%	[1000]	ug/L
Mo 202.031†	14925.8	180.35	1.21%	[1000]	ug/L
Na 589.592 Radial†	35631.4	89.65	0.25%	[10000]	ug/L
Ni 231.604†	41502.1	348.94	0.84%	[1000]	ug/L
P 214.914†	8714.6	124.90	1.43%	[5000]	ug/L
Pb 220.353†	8520.5	113.82	1.34%	[1000]	ug/L
S 181.975 Axial†	1493.8	21.50	1.44%	[2000]	ug/L
Sb 206.836†	3046.8	34.98	1.15%	[1000]	ug/L
Se 196.026†	1628.6	18.42	1.13%	[1000]	ug/L
Si 251.611†	165478.9	1337.78	0.81%	[5000]	ug/L
Sn 189.927†	5992.1	72.16	1.20%	[1000]	ug/L
Sr 421.552†	155308.8	505.14	0.33%	[1000]	ug/L
Ti 334.940†	665338.6	2734.49	0.41%	[1000]	ug/L
Tl 190.801†	3459.8	42.20	1.22%	[1000]	ug/L
U 409.014†	35507.5	297.42	0.84%	[1000]	ug/L
V 292.402†	152535.5	1146.26	0.75%	[1000]	ug/L
Zn 213.857†	111126.6	937.02	0.84%	[1000]	ug/L
SiO2†	163847.9	2398.58	1.46%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/18/2010 15:20:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	4977.4	4977.4	93.4	%	15:23:03
1	Y RADIAL	5215.1	5215.1	92.39	%	15:23:03
1	Al 396.153Radial†	61029.2	65313.1	[50000]	ug/L	15:22:43
1	Ca 317.933Radial†	29605.9	31665.7	[50000]	ug/L	15:22:43
1	Fe 238.204 Radial†	2257.5	2403.3	[20000]	ug/L	15:23:03
1	Mg 279.077 IEC†	1473.0	1573.9	[50000]	ug/L	15:23:03
1	Na 589.592 Radial†	72561.4	78759.1	[20000]	ug/L	15:22:43
1	Sc 361.383	913900.3	913900.3	96.796	%	15:24:00
1	Y 371.029	757864.2	757864.2	95.045	%	15:24:00
2	Sc Radial	5142.3	5142.3	96.5	%	15:23:28
2	Y RADIAL	5369.3	5369.3	95.12	%	15:23:28
2	Al 396.153Radial†	59026.7	61143.3	[50000]	ug/L	15:23:08
2	Ca 317.933Radial†	28645.8	29654.6	[50000]	ug/L	15:23:08
2	Fe 238.204 Radial†	2221.4	2288.4	[20000]	ug/L	15:23:28
2	Mg 279.077 IEC†	1444.3	1493.6	[50000]	ug/L	15:23:28
2	Na 589.592 Radial†	70130.7	73749.7	[20000]	ug/L	15:23:08
2	Sc 361.383	893619.0	893619.0	94.648	%	15:24:06
2	Y 371.029	740788.0	740788.0	92.904	%	15:24:06
3	Sc Radial	5234.6	5234.6	98.3	%	15:23:53
3	Y RADIAL	5479.3	5479.3	97.07	%	15:23:53
3	Al 396.153Radial†	59859.0	60912.8	[50000]	ug/L	15:23:33
3	Ca 317.933Radial†	28882.6	29372.7	[50000]	ug/L	15:23:33
3	Fe 238.204 Radial†	2245.4	2272.3	[20000]	ug/L	15:23:53
3	Mg 279.077 IEC†	1455.9	1479.0	[50000]	ug/L	15:23:53
3	Na 589.592 Radial†	70828.6	73179.6	[20000]	ug/L	15:23:33
3	Sc 361.383	878817.6	878817.6	93.080	%	15:24:12
3	Y 371.029	728256.4	728256.4	91.332	%	15:24:12

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	895445.6	17612.56	1.97%	94.842	%
Sc Radial	5118.1	130.31	2.55%	96.1	%
Y 371.029	742302.9	14861.93	2.00%	93.094	%
Y RADIAL	5354.6	132.72	2.48%	94.86	%
Al 396.153Radial†	62456.4	2476.68	3.97%	[50000]	ug/L
Ca 317.933Radial†	30231.0	1250.45	4.14%	[50000]	ug/L
Fe 238.204 Radial†	2321.4	71.44	3.08%	[20000]	ug/L
Mg 279.077 IEC†	1515.5	51.08	3.37%	[50000]	ug/L
Na 589.592 Radial†	75229.5	3070.00	4.08%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	227.5	0.00000	0.999979	
Al 396.153Radial	3	Lin Thru 0	0.0	1.250	0.00000	0.999997	
As 188.979	3	Lin Thru 0	0.0	2.459	0.00000	0.999995	
B 249.677	3	Lin Thru 0	0.0	46.09	0.00000	0.999971	
Ba 233.527	3	Lin Thru 0	0.0	136.8	0.00000	0.999992	
Be 313.107	3	Lin Thru 0	0.0	2826	0.00000	0.999998	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6049	0.00000	0.999996	
Cd 226.502	3	Lin Thru 0	0.0	93.67	0.00000	0.999995	
Co 228.616	3	Lin Thru 0	0.0	51.25	0.00000	0.999997	
Cr 267.716	3	Lin Thru 0	0.0	91.40	0.00000	0.999990	
Cu 324.752	3	Lin Thru 0	0.0	343.1	0.00000	0.999970	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1158	0.00000	0.999990	
K 766.490 Radial	3	Lin Thru 0	0.0	4.728	0.00000	0.999935	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0304	0.00000	0.999969
Mn 257.610	3	Lin Thru 0	0.0	944.8	0.00000	0.999995
Mo 202.031	3	Lin Thru 0	0.0	14.89	0.00000	0.999985
Na 589.592 Radia	2	Lin Thru 0	0.0	3.722	0.00000	0.999773
Ni 231.604	3	Lin Thru 0	0.0	41.45	0.00000	0.999996
P 214.914	3	Lin Thru 0	0.0	1.738	0.00000	0.999986
Pb 220.353	3	Lin Thru 0	0.0	8.507	0.00000	0.999992
S 181.975 Axial	3	Lin Thru 0	0.0	0.7460	0.00000	0.999995
Sb 206.836	3	Lin Thru 0	0.0	3.037	0.00000	0.999979
Se 196.026	3	Lin Thru 0	0.0	1.631	0.00000	0.999997
Si 251.611	3	Lin Thru 0	0.0	33.06	0.00000	0.999997
Sn 189.927	3	Lin Thru 0	0.0	5.974	0.00000	0.999982
Sr 421.552	3	Lin Thru 0	0.0	156.3	0.00000	0.999902
Ti 334.940	3	Lin Thru 0	0.0	660.8	0.00000	0.999905
Tl 190.801	3	Lin Thru 0	0.0	3.460	0.00000	0.999998
U 409.014	3	Lin Thru 0	0.0	35.31	0.00000	0.999939
V 292.402	3	Lin Thru 0	0.0	152.1	0.00000	0.999984
Zn 213.857	3	Lin Thru 0	0.0	111.0	0.00000	0.999995
SiO2	3	Lin Thru 0	0.0	15.33	0.00000	0.999999

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 1/18/2010 15:26:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5273.4	5273.4	99.0	%			15:28:16
1	Y RADIAL	5548.6	5548.6	98.29	%			15:28:16
1	Al 396.153Radial†	6382.7	6443.2	5129.2	ug/L	5129.2	ppb	15:28:16
1	Ca 317.933Radial†	3041.5	3051.9	5045.5	ug/L	5045.5	ppb	15:28:36
1	Fe 238.204 Radial†	594.0	587.2	5085.9	ug/L	5085.9	ppb	15:28:36
1	K 766.490 Radial†	14413.5	11885.0	2510.3	ug/L	2510.3	ppb	15:28:16
1	Mg 279.077 IEC†	161.6	160.7	5292.6	ug/L	5292.6	ppb	15:28:36
1	Na 589.592 Radial†	8000.6	9180.8	2466.8	ug/L	2466.8	ppb	15:28:16
1	Sr 421.552†	82507.4	83337.1	533.32	ug/L	533.32	ppb	15:28:16
1	Sc 361.383	925766.2	925766.2	98.053	%			15:29:33
1	Y 371.029	774647.2	774647.2	97.150	%			15:29:33
1	Ag 328.068†	59232.1	59997.1	267.03	ug/L	267.03	ppb	15:29:33
1	As 188.979†	1157.4	1199.9	492.32	ug/L	492.32	ppb	15:29:53
1	B 249.677†	23360.2	24351.6	526.05	ug/L	526.05	ppb	15:29:33
1	Ba 233.527†	70187.8	71561.8	524.49	ug/L	524.49	ppb	15:29:33
1	Be 313.107†	735963.0	755108.1	268.37	ug/L	268.37	ppb	15:29:33
1	Cd 226.502†	46780.8	47926.6	511.55	ug/L	511.55	ppb	15:29:33
1	Co 228.616†	25853.0	26439.8	516.10	ug/L	516.10	ppb	15:29:53
1	Cr 267.716†	44913.3	45725.1	500.93	ug/L	500.93	ppb	15:29:33
1	Cu 324.752†	181638.6	179079.0	521.90	ug/L	521.90	ppb	15:29:33
1	Mn 257.610†	490866.9	500158.6	529.65	ug/L	529.65	ppb	15:29:33
1	Mo 202.031†	8069.9	8211.3	551.91	ug/L	551.91	ppb	15:29:53
1	Ni 231.604†	20966.8	21282.6	513.18	ug/L	513.18	ppb	15:29:53
1	P 214.914†	4657.7	4515.6	2496.5	ug/L	2496.5	ppb	15:29:53
1	Pb 220.353†	4260.3	4398.7	518.83	ug/L	518.83	ppb	15:29:53
1	S 181.975 Axial†	1909.4	1905.8	2553.8	ug/L	2553.8	ppb	15:29:53
1	Sb 206.836†	1558.2	1550.5	530.61	ug/L	530.61	ppb	15:29:53
1	Se 196.026†	4177.7	4293.6	2653.2	ug/L	2653.2	ppb	15:29:53
1	Si 251.611†	160487.1	163176.8	4929.6	ug/L	4929.6	ppb	15:29:33
1	Sn 189.927†	3234.5	3291.2	551.75	ug/L	551.75	ppb	15:29:53
1	Ti 334.940†	329066.9	336990.1	509.78	ug/L	509.78	ppb	15:29:33
1	Tl 190.801†	1832.8	1907.9	554.93	ug/L	554.93	ppb	15:29:53
1	U 409.014†	15908.0	17868.8	504.32	ug/L	504.32	ppb	15:29:33
1	V 292.402†	76108.2	79097.1	527.41	ug/L	527.41	ppb	15:29:33
1	Zn 213.857†	57878.8	58320.5	520.96	ug/L	520.96	ppb	15:29:33
1	SiO2†	159888.9	162538.9	10589	ug/L	10589	ppb	15:30:51
2	Sc Radial	5368.1	5368.1	101	%			15:28:41
2	Y RADIAL	5601.2	5601.2	99.23	%			15:28:41
2	Al 396.153Radial†	6452.4	6398.6	5093.6	ug/L	5093.6	ppb	15:28:41
2	Ca 317.933Radial†	3079.4	3035.3	5018.1	ug/L	5018.1	ppb	15:29:01
2	Fe 238.204 Radial†	601.2	583.8	5056.1	ug/L	5056.1	ppb	15:29:01
2	K 766.490 Radial†	14744.1	11956.3	2525.4	ug/L	2525.4	ppb	15:28:41
2	Mg 279.077 IEC†	163.5	159.6	5259.0	ug/L	5259.0	ppb	15:29:01
2	Na 589.592 Radial†	8036.2	9073.6	2438.0	ug/L	2438.0	ppb	15:28:41
2	Sr 421.552†	83466.0	82818.1	530.00	ug/L	530.00	ppb	15:28:41
2	Sc 361.383	927820.1	927820.1	98.270	%			15:29:59
2	Y 371.029	776573.8	776573.8	97.392	%			15:29:59
2	Ag 328.068†	58813.1	59437.0	264.55	ug/L	264.55	ppb	15:29:59
2	As 188.979†	1149.3	1189.1	487.86	ug/L	487.86	ppb	15:30:19
2	B 249.677†	23218.5	24154.6	521.79	ug/L	521.79	ppb	15:29:59
2	Ba 233.527†	69686.3	70893.0	519.59	ug/L	519.59	ppb	15:29:59
2	Be 313.107†	731392.3	748795.4	266.12	ug/L	266.12	ppb	15:29:59
2	Cd 226.502†	46414.9	47448.7	506.45	ug/L	506.45	ppb	15:29:59
2	Co 228.616†	25750.9	26277.5	512.94	ug/L	512.94	ppb	15:30:19
2	Cr 267.716†	44621.0	45326.2	496.56	ug/L	496.56	ppb	15:29:59
2	Cu 324.752†	180292.6	177299.2	516.72	ug/L	516.72	ppb	15:29:59
2	Mn 257.610†	488043.1	496176.9	525.43	ug/L	525.43	ppb	15:29:59
2	Mo 202.031†	8031.6	8154.2	548.07	ug/L	548.07	ppb	15:30:19
2	Ni 231.604†	20890.7	21157.8	510.17	ug/L	510.17	ppb	15:30:19

2	P 214.914†	4623.4	4470.2	2471.4 ug/L	2471.4 ppb	15:30:19
2	Pb 220.353†	4249.0	4377.6	516.34 ug/L	516.34 ppb	15:30:19
2	S 181.975 Axial†	1892.2	1884.0	2524.6 ug/L	2524.6 ppb	15:30:19
2	Sb 206.836†	1556.5	1545.1	528.71 ug/L	528.71 ppb	15:30:19
2	Se 196.026†	4144.6	4250.5	2626.6 ug/L	2626.6 ppb	15:30:19
2	Si 251.611†	159329.8	161636.8	4883.1 ug/L	4883.1 ppb	15:29:59
2	Sn 189.927†	3216.2	3265.3	547.41 ug/L	547.41 ppb	15:30:19
2	Ti 334.940†	326995.2	334139.0	505.47 ug/L	505.47 ppb	15:29:59
2	Tl 190.801†	1806.1	1876.6	545.84 ug/L	545.84 ppb	15:30:19
2	U 409.014†	15832.7	17756.3	501.14 ug/L	501.14 ppb	15:29:59
2	V 292.402†	75657.2	78466.2	523.21 ug/L	523.21 ppb	15:29:59
2	Zn 213.857†	57395.9	57698.4	515.39 ug/L	515.39 ppb	15:29:59
2	SiO2†	160245.5	162540.8	10589 ug/L	10589 ppb	15:30:56
3	Sc Radial	5233.8	5233.8	98.2 %		15:29:06
3	Y RADIAL	5532.6	5532.6	98.01 %		15:29:06
3	Al 396.153Radial†	6399.5	6509.0	5182.2 ug/L	5182.2 ppb	15:29:06
3	Ca 317.933Radial†	3043.7	3077.4	5087.5 ug/L	5087.5 ppb	15:29:26
3	Fe 238.204 Radial†	592.8	590.5	5114.1 ug/L	5114.1 ppb	15:29:26
3	K 766.490 Radial†	14565.2	12149.5	2566.2 ug/L	2566.2 ppb	15:29:06
3	Mg 279.077 IEC†	164.2	164.4	5417.2 ug/L	5417.2 ppb	15:29:26
3	Na 589.592 Radial†	7848.5	9087.1	2441.6 ug/L	2441.6 ppb	15:29:06
3	Sr 421.552†	81897.6	83346.4	533.38 ug/L	533.38 ppb	15:29:06
3	Sc 361.383	935528.1	935528.1	99.087 %		15:30:25
3	Y 371.029	783277.1	783277.1	98.233 %		15:30:25
3	Ag 328.068†	59296.8	59432.1	264.55 ug/L	264.55 ppb	15:30:25
3	As 188.979†	1157.9	1188.2	487.52 ug/L	487.52 ppb	15:30:45
3	B 249.677†	23536.1	24280.6	524.53 ug/L	524.53 ppb	15:30:25
3	Ba 233.527†	70206.7	70834.0	519.16 ug/L	519.16 ppb	15:30:25
3	Be 313.107†	738606.1	749943.5	266.53 ug/L	266.53 ppb	15:30:25
3	Cd 226.502†	46816.6	47464.9	506.62 ug/L	506.62 ppb	15:30:25
3	Co 228.616†	25654.5	25964.3	506.81 ug/L	506.81 ppb	15:30:45
3	Cr 267.716†	44989.8	45324.3	496.54 ug/L	496.54 ppb	15:30:25
3	Cu 324.752†	181955.7	177466.0	517.21 ug/L	517.21 ppb	15:30:25
3	Mn 257.610†	491821.6	495898.3	525.14 ug/L	525.14 ppb	15:30:25
3	Mo 202.031†	8030.3	8085.5	543.46 ug/L	543.46 ppb	15:30:45
3	Ni 231.604†	20838.4	20929.9	504.68 ug/L	504.68 ppb	15:30:45
3	P 214.914†	4601.1	4409.0	2436.0 ug/L	2436.0 ppb	15:30:45
3	Pb 220.353†	4232.8	4325.6	510.23 ug/L	510.23 ppb	15:30:45
3	S 181.975 Axial†	1888.7	1864.6	2498.6 ug/L	2498.6 ppb	15:30:45
3	Sb 206.836†	1551.7	1527.3	522.63 ug/L	522.63 ppb	15:30:45
3	Se 196.026†	4144.2	4215.3	2605.3 ug/L	2605.3 ppb	15:30:45
3	Si 251.611†	160580.8	161563.5	4880.9 ug/L	4880.9 ppb	15:30:25
3	Sn 189.927†	3208.6	3230.6	541.62 ug/L	541.62 ppb	15:30:45
3	Ti 334.940†	329807.0	334235.1	505.61 ug/L	505.61 ppb	15:30:25
3	Tl 190.801†	1809.1	1864.5	542.37 ug/L	542.37 ppb	15:30:45
3	U 409.014†	15896.8	17688.2	499.21 ug/L	499.21 ppb	15:30:25
3	V 292.402†	76306.2	78486.9	523.27 ug/L	523.27 ppb	15:30:25
3	Zn 213.857†	57930.9	57757.0	515.94 ug/L	515.94 ppb	15:30:25
3	SiO2†	161668.6	162633.5	10595 ug/L	10595 ppb	15:31:02

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	929704.8	98.470	%	0.5451				0.55%
Sc Radial	5291.7	99.3	%	1.29				1.30%
Y 371.029	778166.1	97.592	%	0.5681				0.58%
Y RADIAL	5560.8	98.51	%	0.636				0.65%
Ag 328.068†	59622.0	265.38	ug/L	1.436	265.38	ppb	1.436	0.54%
QC value within limits for Ag 328.068 Recovery = 106.15%								
Al 396.153Radial†	6450.3	5135.0	ug/L	44.59	5135.0	ppb	44.59	0.87%
QC value within limits for Al 396.153Radial Recovery = 102.70%								
As 188.979†	1192.4	489.23	ug/L	2.679	489.23	ppb	2.679	0.55%
QC value within limits for As 188.979 Recovery = 97.85%								
B 249.677†	24262.3	524.12	ug/L	2.159	524.12	ppb	2.159	0.41%
QC value within limits for B 249.677 Recovery = 104.82%								
Ba 233.527†	71096.3	521.08	ug/L	2.961	521.08	ppb	2.961	0.57%
QC value within limits for Ba 233.527 Recovery = 104.22%								
Be 313.107†	751282.3	267.01	ug/L	1.195	267.01	ppb	1.195	0.45%
QC value within limits for Be 313.107 Recovery = 106.80%								
Ca 317.933Radial†	3054.9	5050.4	ug/L	34.98	5050.4	ppb	34.98	0.69%

```
   QC value within limits for Ca 317.933Radial  Recovery = 101.01%
Cd 226.502†            47613.4      508.21 ug/L         2.899      508.21 ppb          2.899   0.57%
   QC value within limits for Cd 226.502  Recovery = 101.64%
Co 228.616†            26227.2      511.95 ug/L         4.722      511.95 ppb          4.722   0.92%
   QC value within limits for Co 228.616  Recovery = 102.39%
Cr 267.716†            45458.6      498.01 ug/L         2.528      498.01 ppb          2.528   0.51%
   QC value within limits for Cr 267.716  Recovery = 99.60%
Cu 324.752†           177948.1      518.61 ug/L         2.864      518.61 ppb          2.864   0.55%
   QC value within limits for Cu 324.752  Recovery = 103.72%
Fe 238.204 Radial†       587.2      5085.4 ug/L        29.04      5085.4 ppb         29.04   0.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.71%
K 766.490 Radial†      11996.9      2534.0 ug/L        28.95      2534.0 ppb         28.95   1.14%
   QC value within limits for K 766.490 Radial  Recovery = 101.36%
Mg 279.077 IEC†          161.6      5323.0 ug/L        83.36      5323.0 ppb         83.36   1.57%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.46%
Mn 257.610†           497411.3      526.74 ug/L         2.524      526.74 ppb          2.524   0.48%
   QC value within limits for Mn 257.610  Recovery = 105.35%
Mo 202.031†             8150.3      547.81 ug/L         4.231      547.81 ppb          4.231   0.77%
   QC value within limits for Mo 202.031  Recovery = 109.56%
Na 589.592 Radial†      9113.9      2448.8 ug/L        15.69      2448.8 ppb         15.69   0.64%
   QC value within limits for Na 589.592 Radial  Recovery = 97.95%
Ni 231.604†            21123.4      509.34 ug/L         4.313      509.34 ppb          4.313   0.85%
   QC value within limits for Ni 231.604  Recovery = 101.87%
P 214.914†              4464.9      2467.9 ug/L        30.40      2467.9 ppb         30.40   1.23%
   QC value within limits for P 214.914  Recovery = 98.72%
Pb 220.353†             4367.3      515.14 ug/L         4.424      515.14 ppb          4.424   0.86%
   QC value within limits for Pb 220.353  Recovery = 103.03%
S 181.975 Axial†        1884.8      2525.6 ug/L        27.61      2525.6 ppb         27.61   1.09%
   QC value within limits for S 181.975 Axial  Recovery = 101.03%
Sb 206.836†             1541.0      527.32 ug/L         4.166      527.32 ppb          4.166   0.79%
   QC value within limits for Sb 206.836  Recovery = 105.46%
Se 196.026†             4253.1      2628.4 ug/L        24.01      2628.4 ppb         24.01   0.91%
   QC value within limits for Se 196.026  Recovery = 105.13%
Si 251.611†           162125.7      4897.9 ug/L        27.52      4897.9 ppb         27.52   0.56%
   QC value within limits for Si 251.611  Recovery = 97.96%
Sn 189.927†             3262.4      546.93 ug/L         5.083      546.93 ppb          5.083   0.93%
   QC value within limits for Sn 189.927  Recovery = 109.39%
Sr 421.552†            83167.2      532.23 ug/L         1.935      532.23 ppb          1.935   0.36%
   QC value within limits for Sr 421.552  Recovery = 106.45%
Ti 334.940†           335121.4      506.95 ug/L         2.450      506.95 ppb          2.450   0.48%
   QC value within limits for Ti 334.940  Recovery = 101.39%
Tl 190.801†             1883.0      547.71 ug/L         6.483      547.71 ppb          6.483   1.18%
   QC value within limits for Tl 190.801  Recovery = 109.54%
U 409.014†             17771.1      501.55 ug/L         2.579      501.55 ppb          2.579   0.51%
   QC value within limits for U 409.014  Recovery = 100.31%
V 292.402†             78683.4      524.63 ug/L         2.406      524.63 ppb          2.406   0.46%
   QC value within limits for V 292.402  Recovery = 104.93%
Zn 213.857†            57925.3      517.43 ug/L         3.071      517.43 ppb          3.071   0.59%
   QC value within limits for Zn 213.857  Recovery = 103.49%
SiO2†                 162571.1       10591 ug/L           3.6       10591 ppb            3.6   0.03%
   QC value within limits for SiO2  Recovery = 99.03%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/18/2010 15:33:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5268.2	5268.2	98.9	%			15:35:06
1	Y RADIAL	5531.2	5531.2	97.99	%			15:35:06
1	Al 396.153Radial†	3.6	-1.0	-0.7898	ug/L	-0.7898	ppb	15:35:06
1	Ca 317.933Radial†	17.0	-3.4	-5.6878	ug/L	-5.6878	ppb	15:35:26
1	Fe 238.204 Radial†	12.4	-0.3	-2.8052	ug/L	-2.8052	ppb	15:35:26
1	K 766.490 Radial†	2859.4	215.9	45.672	ug/L	45.672	ppb	15:35:06
1	Mg 279.077 IEC†	0.8	-1.8	-60.894	ug/L	-60.894	ppb	15:35:26
1	Na 589.592 Radial†	-1111.4	-25.1	-6.7447	ug/L	-6.7447	ppb	15:35:06
1	Sr 421.552†	45.7	34.5	0.2211	ug/L	0.2211	ppb	15:35:06
1	Sc 361.383	946083.8	946083.8	100.20	%			15:36:22
1	Y 371.029	799390.4	799390.4	100.25	%			15:36:22
1	Ag 328.068†	415.7	3.7	0.0208	ug/L	0.0208	ppb	15:36:27
1	As 188.979†	-23.6	-4.0	-1.6335	ug/L	-1.6335	ppb	15:36:47
1	B 249.677†	-280.7	247.4	5.3680	ug/L	5.3680	ppb	15:36:47
1	Ba 233.527†	-1.7	-21.4	-0.1573	ug/L	-0.1573	ppb	15:36:47
1	Be 313.107†	-4369.7	170.0	0.0600	ug/L	0.0600	ppb	15:36:27
1	Cd 226.502†	-218.0	-0.7	-0.0082	ug/L	-0.0082	ppb	15:36:47
1	Co 228.616†	-65.8	7.7	0.1511	ug/L	0.1511	ppb	15:36:47
1	Cr 267.716†	82.4	2.1	0.0263	ug/L	0.0263	ppb	15:36:47
1	Cu 324.752†	6043.1	-135.7	-0.3914	ug/L	-0.3914	ppb	15:36:27
1	Mn 257.610†	541.7	85.0	0.0922	ug/L	0.0922	ppb	15:36:47
1	Mo 202.031†	19.2	0.3	0.0231	ug/L	0.0231	ppb	15:36:47
1	Ni 231.604†	109.0	8.3	0.1993	ug/L	0.1993	ppb	15:36:47
1	P 214.914†	229.3	-5.7	-3.2049	ug/L	-3.2049	ppb	15:36:47
1	Pb 220.353†	-62.7	-8.8	-1.0354	ug/L	-1.0354	ppb	15:36:47
1	S 181.975 Axial†	43.2	1.6	2.1770	ug/L	2.1770	ppb	15:36:47
1	Sb 206.836†	48.9	10.1	3.3476	ug/L	3.3476	ppb	15:36:47
1	Se 196.026†	-24.2	8.7	5.3491	ug/L	5.3491	ppb	15:36:47
1	Si 251.611†	545.5	47.2	1.4283	ug/L	1.4283	ppb	15:36:47
1	Sn 189.927†	16.1	8.6	1.4368	ug/L	1.4368	ppb	15:36:47
1	Ti 334.940†	-1440.8	-49.0	-0.0665	ug/L	-0.0665	ppb	15:36:27
1	Tl 190.801†	-46.8	-8.0	-2.3012	ug/L	-2.3012	ppb	15:36:47
1	U 409.014†	-1926.7	-277.9	-7.8691	ug/L	-7.8691	ppb	15:36:22
1	V 292.402†	-1513.2	-32.5	-0.2294	ug/L	-0.2294	ppb	15:36:27
1	Zn 213.857†	772.2	62.9	0.5666	ug/L	0.5666	ppb	15:36:47
1	SiO2†	560.0	33.9	2.2097	ug/L	2.2097	ppb	15:37:53
2	Sc Radial	5312.7	5312.7	99.7	%			15:35:31
2	Y RADIAL	5676.5	5676.5	100.6	%			15:35:31
2	Al 396.153Radial†	-12.2	-16.8	-13.512	ug/L	-13.512	ppb	15:35:31
2	Ca 317.933Radial†	20.7	0.1	0.2024	ug/L	0.2024	ppb	15:35:51
2	Fe 238.204 Radial†	10.8	-2.0	-17.498	ug/L	-17.498	ppb	15:35:51
2	K 766.490 Radial†	2657.8	-10.4	-2.1995	ug/L	-2.1995	ppb	15:35:31
2	Mg 279.077 IEC†	2.1	-0.5	-17.814	ug/L	-17.814	ppb	15:35:51
2	Na 589.592 Radial†	-1103.0	-7.3	-1.9597	ug/L	-1.9597	ppb	15:35:31
2	Sr 421.552†	53.6	42.1	0.2695	ug/L	0.2695	ppb	15:35:31
2	Sc 361.383	943725.8	943725.8	99.955	%			15:36:53
2	Y 371.029	797207.0	797207.0	99.980	%			15:36:53
2	Ag 328.068†	385.6	-25.5	-0.1138	ug/L	-0.1138	ppb	15:36:58
2	As 188.979†	-26.2	-6.6	-2.6838	ug/L	-2.6838	ppb	15:37:18
2	B 249.677†	-264.6	262.8	5.7048	ug/L	5.7048	ppb	15:37:18
2	Ba 233.527†	8.0	-11.7	-0.0858	ug/L	-0.0858	ppb	15:37:18
2	Be 313.107†	-4483.2	45.5	0.0160	ug/L	0.0160	ppb	15:36:58
2	Cd 226.502†	-205.6	11.2	0.1201	ug/L	0.1201	ppb	15:37:18
2	Co 228.616†	-70.2	3.2	0.0642	ug/L	0.0642	ppb	15:37:18
2	Cr 267.716†	84.5	4.5	0.0502	ug/L	0.0502	ppb	15:37:18
2	Cu 324.752†	6249.1	85.4	0.2507	ug/L	0.2507	ppb	15:36:58
2	Mn 257.610†	497.7	42.3	0.0438	ug/L	0.0438	ppb	15:37:18
2	Mo 202.031†	31.4	12.6	0.8473	ug/L	0.8473	ppb	15:37:18
2	Ni 231.604†	98.5	-2.0	-0.0484	ug/L	-0.0484	ppb	15:37:18

2	P 214.914†	229.2	-5.3	-3.0594 ug/L	-3.0594 ppb	15:37:18
2	Pb 220.353†	-63.0	-9.3	-1.0903 ug/L	-1.0903 ppb	15:37:18
2	S 181.975 Axial†	46.1	4.6	6.1909 ug/L	6.1909 ppb	15:37:18
2	Sb 206.836†	42.8	4.1	1.3578 ug/L	1.3578 ppb	15:37:18
2	Se 196.026†	-27.2	5.7	3.4572 ug/L	3.4572 ppb	15:37:18
2	Si 251.611†	521.2	24.3	0.7250 ug/L	0.7250 ppb	15:37:18
2	Sn 189.927†	8.1	0.6	0.0952 ug/L	0.0952 ppb	15:37:18
2	Ti 334.940†	-1424.9	-36.8	-0.0521 ug/L	-0.0521 ppb	15:36:58
2	Tl 190.801†	-46.7	-8.0	-2.3042 ug/L	-2.3042 ppb	15:37:18
2	U 409.014†	-1808.3	-164.2	-4.6489 ug/L	-4.6489 ppb	15:36:53
2	V 292.402†	-1475.4	1.5	0.0154 ug/L	0.0154 ppb	15:36:58
2	Zn 213.857†	755.3	47.9	0.4335 ug/L	0.4335 ppb	15:37:18
2	SiO2†	558.5	33.8	2.1792 ug/L	2.1792 ppb	15:37:58
3	Sc Radial	5231.2	5231.2	98.2 %		15:35:56
3	Y RADIAL	5567.1	5567.1	98.62 %		15:35:56
3	Al 396.153Radial†	-3.9	-8.6	-6.9319 ug/L	-6.9319 ppb	15:35:56
3	Ca 317.933Radial†	20.1	-0.1	-0.1493 ug/L	-0.1493 ppb	15:36:16
3	Fe 238.204 Radial†	11.9	-0.7	-6.3736 ug/L	-6.3736 ppb	15:36:16
3	K 766.490 Radial†	2731.2	105.8	22.382 ug/L	22.382 ppb	15:35:56
3	Mg 279.077 IEC†	4.2	1.6	53.570 ug/L	53.570 ppb	15:36:16
3	Na 589.592 Radial†	-1139.2	-61.4	-16.489 ug/L	-16.489 ppb	15:35:56
3	Sr 421.552†	22.4	11.1	0.0713 ug/L	0.0713 ppb	15:35:56
3	Sc 361.383	942022.1	942022.1	99.775 %		15:37:23
3	Y 371.029	796292.5	796292.5	99.865 %		15:37:23
3	Ag 328.068†	389.2	-21.1	-0.0939 ug/L	-0.0939 ppb	15:37:28
3	As 188.979†	-23.5	-4.0	-1.6300 ug/L	-1.6300 ppb	15:37:48
3	B 249.677†	-285.8	241.0	5.2301 ug/L	5.2301 ppb	15:37:48
3	Ba 233.527†	0.5	-19.2	-0.1417 ug/L	-0.1417 ppb	15:37:48
3	Be 313.107†	-4339.0	182.0	0.0643 ug/L	0.0643 ppb	15:37:28
3	Cd 226.502†	-212.0	4.3	0.0464 ug/L	0.0464 ppb	15:37:48
3	Co 228.616†	-65.9	7.4	0.1451 ug/L	0.1451 ppb	15:37:48
3	Cr 267.716†	83.9	4.0	0.0445 ug/L	0.0445 ppb	15:37:48
3	Cu 324.752†	6024.2	-128.6	-0.3734 ug/L	-0.3734 ppb	15:37:28
3	Mn 257.610†	491.2	36.8	0.0361 ug/L	0.0361 ppb	15:37:48
3	Mo 202.031†	26.9	8.2	0.5474 ug/L	0.5474 ppb	15:37:48
3	Ni 231.604†	108.6	8.3	0.1999 ug/L	0.1999 ppb	15:37:48
3	P 214.914†	226.5	-7.6	-4.2861 ug/L	-4.2861 ppb	15:37:48
3	Pb 220.353†	-58.7	-5.1	-0.6030 ug/L	-0.6030 ppb	15:37:48
3	S 181.975 Axial†	49.0	7.6	10.199 ug/L	10.199 ppb	15:37:48
3	Sb 206.836†	52.4	13.8	4.5459 ug/L	4.5459 ppb	15:37:48
3	Se 196.026†	-33.0	-0.2	-0.1439 ug/L	-0.1439 ppb	15:37:48
3	Si 251.611†	545.4	49.5	1.4894 ug/L	1.4894 ppb	15:37:48
3	Sn 189.927†	6.4	-1.1	-0.1812 ug/L	-0.1812 ppb	15:37:48
3	Ti 334.940†	-1401.8	-16.2	-0.0274 ug/L	-0.0274 ppb	15:37:28
3	Tl 190.801†	-41.8	-3.1	-0.9015 ug/L	-0.9015 ppb	15:37:48
3	U 409.014†	-1759.8	-118.8	-3.3637 ug/L	-3.3637 ppb	15:37:23
3	V 292.402†	-1539.9	-65.9	-0.4298 ug/L	-0.4298 ppb	15:37:28
3	Zn 213.857†	747.7	41.7	0.3754 ug/L	0.3754 ppb	15:37:48
3	SiO2†	518.5	-5.3	-0.3626 ug/L	-0.3626 ppb	15:38:03

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	943943.9	99.978	%	0.2160				0.22%
Sc Radial	5270.7	98.9	%	0.77				0.77%
Y 371.029	797630.0	100.03	%	0.200				0.20%
Y RADIAL	5591.6	99.06	%	1.341				1.35%
Ag 328.068†	-14.3	-0.0623	ug/L	0.07265	-0.0623	ppb	0.07265	116.61%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-8.8	-7.0778	ug/L	6.36231	-7.0778	ppb	6.36231	89.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.9	-1.9824	ug/L	0.60741	-1.9824	ppb	0.60741	30.64%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	250.4	5.4343	ug/L	0.24421	5.4343	ppb	0.24421	4.49%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-17.4	-0.1283	ug/L	0.03763	-0.1283	ppb	0.03763	29.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	132.5	0.0468	ug/L	0.02674	0.0468	ppb	0.02674	57.19%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.1	-1.8783	ug/L	3.30388	-1.8783	ppb	3.30388	175.90%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 4.9      0.0528 ug/L       0.06443      0.0528 ppb        0.06443 122.06%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.1      0.1201 ug/L       0.04853      0.1201 ppb        0.04853  40.41%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.5      0.0403 ug/L       0.01251      0.0403 ppb        0.01251  31.01%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -59.6     -0.1714 ug/L       0.36560     -0.1714 ppb        0.36560 213.33%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.0     -8.8924 ug/L       7.66363     -8.8924 ppb        7.66363  86.18%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         103.8      21.952 ug/L       23.9386      21.952 ppb        23.9386 109.05%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.3     -8.3795 ug/L      57.81203     -8.3795 ppb       57.81203 689.92%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                54.7      0.0574 ug/L       0.03041      0.0574 ppb        0.03041  53.02%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.0      0.4726 ug/L       0.41716      0.4726 ppb        0.41716  88.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -31.3     -8.3979 ug/L       7.40447     -8.3979 ppb        7.40447  88.17%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.9      0.1170 ug/L       0.14318      0.1170 ppb        0.14318 122.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -6.2     -3.5168 ug/L       0.67018     -3.5168 ppb        0.67018  19.06%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -7.7     -0.9096 ug/L       0.26691     -0.9096 ppb        0.26691  29.34%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            4.6      6.1891 ug/L       4.01117      6.1891 ppb        4.01117  64.81%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 9.3      3.0838 ug/L       1.61036      3.0838 ppb        1.61036  52.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 4.8      2.8875 ug/L       2.79045      2.8875 ppb        2.79045  96.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                40.3      1.2142 ug/L       0.42479      1.2142 ppb        0.42479  34.98%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.7      0.4503 ug/L       0.86544      0.4503 ppb        0.86544 192.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                29.3      0.1873 ug/L       0.10333      0.1873 ppb        0.10333  55.17%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -34.0     -0.0487 ug/L       0.01976     -0.0487 ppb        0.01976  40.58%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -6.4     -1.8356 ug/L       0.80900     -1.8356 ppb        0.80900  44.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -187.0     -5.2939 ug/L       2.32090     -5.2939 ppb        2.32090  43.84%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -32.3     -0.2146 ug/L       0.22295     -0.2146 ppb        0.22295 103.89%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                50.9      0.4585 ug/L       0.09804      0.4585 ppb        0.09804  21.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      20.8      1.3421 ug/L       1.47640      1.3421 ppb        1.47640 110.00%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 1/18/2010 15:40:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5244.5	5244.5	98.4	%			15:42:07
1	Y RADIAL	5557.7	5557.7	98.46	%			15:42:07
1	Al 396.153Radial†	238.3	237.4	189.41	ug/L	189.41	ppb	15:42:07
1	Ca 317.933Radial†	141.4	123.1	203.43	ug/L	203.43	ppb	15:42:27
1	Fe 238.204 Radial†	21.2	8.7	75.118	ug/L	75.118	ppb	15:42:27
1	K 766.490 Radial†	3451.4	830.3	175.42	ug/L	175.42	ppb	15:42:07
1	Mg 279.077 IEC†	11.8	9.3	307.56	ug/L	307.56	ppb	15:42:27
1	Na 589.592 Radial†	-70.6	1027.0	275.94	ug/L	275.94	ppb	15:42:07
1	Sr 421.552†	777.6	778.1	4.9786	ug/L	4.9786	ppb	15:42:07
1	Sc 361.383	907910.7	907910.7	96.162	%			15:43:24
1	Y 371.029	771466.5	771466.5	96.751	%			15:43:24
1	Ag 328.068†	1454.9	1101.8	4.8467	ug/L	4.8467	ppb	15:43:24
1	As 188.979†	46.1	67.5	27.483	ug/L	27.483	ppb	15:43:44
1	B 249.677†	1872.5	2474.8	53.667	ug/L	53.667	ppb	15:43:24
1	Ba 233.527†	729.1	738.5	5.4115	ug/L	5.4115	ppb	15:43:44
1	Be 313.107†	9811.7	14734.1	5.2254	ug/L	5.2254	ppb	15:43:24
1	Cd 226.502†	249.4	476.2	5.0884	ug/L	5.0884	ppb	15:43:44
1	Co 228.616†	186.8	267.7	5.2391	ug/L	5.2391	ppb	15:43:44
1	Cr 267.716†	555.6	497.7	5.4357	ug/L	5.4357	ppb	15:43:44
1	Cu 324.752†	9670.5	3890.0	11.316	ug/L	11.316	ppb	15:43:24
1	Mn 257.610†	10389.6	10348.7	10.948	ug/L	10.948	ppb	15:43:24
1	Mo 202.031†	184.8	173.3	11.650	ug/L	11.650	ppb	15:43:44
1	Ni 231.604†	324.1	236.5	5.7022	ug/L	5.7022	ppb	15:43:44
1	P 214.914†	498.4	283.7	161.05	ug/L	161.05	ppb	15:43:44
1	Pb 220.353†	35.6	90.8	10.728	ug/L	10.728	ppb	15:43:44
1	S 181.975 Axial†	118.2	81.4	109.05	ug/L	109.05	ppb	15:43:44
1	Sb 206.836†	68.2	32.3	11.009	ug/L	11.009	ppb	15:43:44
1	Se 196.026†	24.3	58.2	36.006	ug/L	36.006	ppb	15:43:44
1	Si 251.611†	3864.0	3521.1	106.38	ug/L	106.38	ppb	15:43:24
1	Sn 189.927†	63.7	58.8	9.8667	ug/L	9.8667	ppb	15:43:44
1	Ti 334.940†	1884.1	3348.1	5.0468	ug/L	5.0468	ppb	15:43:24
1	Tl 190.801†	26.1	65.9	19.104	ug/L	19.104	ppb	15:43:44
1	U 409.014†	-55.1	1587.7	44.939	ug/L	44.939	ppb	15:43:24
1	V 292.402†	-768.3	678.5	4.6991	ug/L	4.6991	ppb	15:43:24
1	Zn 213.857†	1887.1	1254.7	11.245	ug/L	11.245	ppb	15:43:44
1	SiO2†	3870.5	3500.0	228.02	ug/L	228.02	ppb	15:44:40
2	Sc Radial	5211.6	5211.6	97.8	%			15:42:32
2	Y RADIAL	5538.7	5538.7	98.12	%			15:42:32
2	Al 396.153Radial†	247.9	248.8	198.53	ug/L	198.53	ppb	15:42:32
2	Ca 317.933Radial†	145.1	127.8	211.20	ug/L	211.20	ppb	15:42:52
2	Fe 238.204 Radial†	23.0	10.7	92.825	ug/L	92.825	ppb	15:42:52
2	K 766.490 Radial†	3576.2	980.0	207.09	ug/L	207.09	ppb	15:42:32
2	Mg 279.077 IEC†	13.0	10.6	350.07	ug/L	350.07	ppb	15:42:52
2	Na 589.592 Radial†	-92.1	1004.6	269.92	ug/L	269.92	ppb	15:42:32
2	Sr 421.552†	810.0	816.3	5.2226	ug/L	5.2226	ppb	15:42:32
2	Sc 361.383	905858.9	905858.9	95.944	%			15:43:50
2	Y 371.029	770210.7	770210.7	96.594	%			15:43:50
2	Ag 328.068†	1577.1	1232.6	5.4261	ug/L	5.4261	ppb	15:43:50
2	As 188.979†	51.4	73.1	29.773	ug/L	29.773	ppb	15:44:10
2	B 249.677†	1878.3	2485.2	53.892	ug/L	53.892	ppb	15:43:50
2	Ba 233.527†	687.1	696.5	5.1052	ug/L	5.1052	ppb	15:44:10
2	Be 313.107†	9835.5	14782.0	5.2427	ug/L	5.2427	ppb	15:43:50
2	Cd 226.502†	241.2	468.3	5.0021	ug/L	5.0021	ppb	15:44:10
2	Co 228.616†	174.9	255.7	5.0037	ug/L	5.0037	ppb	15:44:10
2	Cr 267.716†	552.4	495.7	5.4128	ug/L	5.4128	ppb	15:44:10
2	Cu 324.752†	9529.4	3765.7	10.953	ug/L	10.953	ppb	15:43:50
2	Mn 257.610†	10403.8	10388.0	10.989	ug/L	10.989	ppb	15:43:50
2	Mo 202.031†	174.7	163.3	10.978	ug/L	10.978	ppb	15:44:10
2	Ni 231.604†	311.1	223.7	5.3945	ug/L	5.3945	ppb	15:44:10

2	P 214.914†	483.7	269.6	153.01 ug/L	153.01 ppb	15:44:10
2	Pb 220.353†	23.8	78.6	9.2964 ug/L	9.2964 ppb	15:44:10
2	S 181.975 Axial†	119.4	82.9	111.15 ug/L	111.15 ppb	15:44:10
2	Sb 206.836†	63.9	27.9	9.5700 ug/L	9.5700 ppb	15:44:10
2	Se 196.026†	15.7	49.2	30.569 ug/L	30.569 ppb	15:44:10
2	Si 251.611†	3773.8	3436.2	103.82 ug/L	103.82 ppb	15:43:50
2	Sn 189.927†	68.4	63.9	10.723 ug/L	10.723 ppb	15:44:10
2	Ti 334.940†	1964.6	3436.5	5.1770 ug/L	5.1770 ppb	15:43:50
2	Tl 190.801†	30.2	70.3	20.374 ug/L	20.374 ppb	15:44:10
2	U 409.014†	35.3	1681.7	47.599 ug/L	47.599 ppb	15:43:50
2	V 292.402†	-732.2	714.4	4.9289 ug/L	4.9289 ppb	15:43:50
2	Zn 213.857†	1889.5	1261.7	11.309 ug/L	11.309 ppb	15:44:10
2	SiO2†	3874.6	3513.5	228.91 ug/L	228.91 ppb	15:44:46
3	Sc Radial	5248.0	5248.0	98.5 %		15:42:58
3	Y RADIAL	5620.5	5620.5	99.57 %		15:42:58
3	Al 396.153Radial†	245.9	245.0	195.54 ug/L	195.54 ppb	15:42:58
3	Ca 317.933Radial†	149.1	130.7	216.08 ug/L	216.08 ppb	15:43:18
3	Fe 238.204 Radial†	19.9	7.3	63.568 ug/L	63.568 ppb	15:43:18
3	K 766.490 Radial†	3447.6	824.1	174.11 ug/L	174.11 ppb	15:42:58
3	Mg 279.077 IEC†	13.1	10.6	349.57 ug/L	349.57 ppb	15:43:18
3	Na 589.592 Radial†	-51.8	1046.1	281.08 ug/L	281.08 ppb	15:42:58
3	Sr 421.552†	817.3	818.0	5.2335 ug/L	5.2335 ppb	15:42:58
3	Sc 361.383	909756.0	909756.0	96.357 %		15:44:15
3	Y 371.029	774285.2	774285.2	97.105 %		15:44:15
3	Ag 328.068†	1565.4	1213.4	5.3336 ug/L	5.3336 ppb	15:44:15
3	As 188.979†	45.0	66.3	26.981 ug/L	26.981 ppb	15:44:35
3	B 249.677†	1831.3	2428.1	52.656 ug/L	52.656 ppb	15:44:15
3	Ba 233.527†	730.9	738.8	5.4129 ug/L	5.4129 ppb	15:44:35
3	Be 313.107†	9886.9	14791.4	5.2461 ug/L	5.2461 ppb	15:44:15
3	Cd 226.502†	276.5	503.8	5.3846 ug/L	5.3846 ppb	15:44:35
3	Co 228.616†	179.9	260.1	5.0887 ug/L	5.0887 ppb	15:44:35
3	Cr 267.716†	534.5	474.7	5.1836 ug/L	5.1836 ppb	15:44:35
3	Cu 324.752†	9628.9	3826.5	11.131 ug/L	11.131 ppb	15:44:15
3	Mn 257.610†	10547.6	10490.8	11.095 ug/L	11.095 ppb	15:44:15
3	Mo 202.031†	168.7	156.3	10.506 ug/L	10.506 ppb	15:44:35
3	Ni 231.604†	328.6	240.5	5.7988 ug/L	5.7988 ppb	15:44:35
3	P 214.914†	479.1	262.7	149.00 ug/L	149.00 ppb	15:44:35
3	Pb 220.353†	28.0	82.8	9.7896 ug/L	9.7896 ppb	15:44:35
3	S 181.975 Axial†	120.6	83.7	112.12 ug/L	112.12 ppb	15:44:35
3	Sb 206.836†	66.3	30.1	10.271 ug/L	10.271 ppb	15:44:35
3	Se 196.026†	16.8	50.4	31.170 ug/L	31.170 ppb	15:44:35
3	Si 251.611†	3852.8	3501.3	105.79 ug/L	105.79 ppb	15:44:15
3	Sn 189.927†	62.1	57.0	9.5701 ug/L	9.5701 ppb	15:44:35
3	Ti 334.940†	1988.5	3452.5	5.2033 ug/L	5.2033 ppb	15:44:15
3	Tl 190.801†	27.8	67.6	19.600 ug/L	19.600 ppb	15:44:35
3	U 409.014†	-62.9	1579.7	44.715 ug/L	44.715 ppb	15:44:15
3	V 292.402†	-775.0	673.2	4.6499 ug/L	4.6499 ppb	15:44:15
3	Zn 213.857†	1891.5	1255.4	11.252 ug/L	11.252 ppb	15:44:35
3	SiO2†	3851.8	3472.4	226.25 ug/L	226.25 ppb	15:44:51

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	907841.8	96.154	%	0.2065				0.21%
Sc Radial	5234.7	98.3	%	0.38				0.38%
Y 371.029	771987.5	96.817	%	0.2617				0.27%
Y RADIAL	5572.3	98.71	%	0.759				0.77%
Ag 328.068†	1182.6	5.2021	ug/L	0.31123	5.2021	ppb	0.31123	5.98%
QC value within limits for Ag 328.068 Recovery = 104.04%								
Al 396.153Radial†	243.7	194.49	ug/L	4.651	194.49	ppb	4.651	2.39%
QC value within limits for Al 396.153Radial Recovery = 97.25%								
As 188.979†	68.9	28.079	ug/L	1.4879	28.079	ppb	1.4879	5.30%
QC value within limits for As 188.979 Recovery = 93.60%								
B 249.677†	2462.7	53.405	ug/L	0.6581	53.405	ppb	0.6581	1.23%
QC value within limits for B 249.677 Recovery = 106.81%								
Ba 233.527†	724.6	5.3099	ug/L	0.17727	5.3099	ppb	0.17727	3.34%
QC value within limits for Ba 233.527 Recovery = 106.20%								
Be 313.107†	14769.2	5.2381	ug/L	0.01106	5.2381	ppb	0.01106	0.21%
QC value within limits for Be 313.107 Recovery = 104.76%								
Ca 317.933Radial†	127.2	210.24	ug/L	6.381	210.24	ppb	6.381	3.03%

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   QC value within limits for Ca 317.933Radial  Recovery = 105.12%
Cd 226.502†              482.8      5.1584 ug/L       0.20065      5.1584 ppb        0.20065   3.89%
   QC value within limits for Cd 226.502  Recovery = 103.17%
Co 228.616†              261.2      5.1105 ug/L       0.11921      5.1105 ppb        0.11921   2.33%
   QC value within limits for Co 228.616  Recovery = 102.21%
Cr 267.716†              489.4      5.3440 ug/L       0.13940      5.3440 ppb        0.13940   2.61%
   QC value within limits for Cr 267.716  Recovery = 106.88%
Cu 324.752†             3827.4      11.133 ug/L        0.1815      11.133 ppb         0.1815   1.63%
   QC value within limits for Cu 324.752  Recovery = 111.33%
Fe 238.204 Radial†         8.9      77.170 ug/L       14.7363      77.170 ppb        14.7363  19.10%
   QC value within limits for Fe 238.204 Radial  Recovery = 77.17%
K 766.490 Radial†        878.1      185.54 ug/L        18.673      185.54 ppb         18.673  10.06%
   QC value within limits for K 766.490 Radial  Recovery = 123.69%
Mg 279.077 IEC†           10.2      335.73 ug/L        24.399      335.73 ppb         24.399   7.27%
   QC value within limits for Mg 279.077 IEC  Recovery = 111.91%
Mn 257.610†            10409.2      11.011 ug/L        0.0761      11.011 ppb         0.0761   0.69%
   QC value within limits for Mn 257.610  Recovery = 110.11%
Mo 202.031†              164.3      11.045 ug/L        0.5746      11.045 ppb         0.5746   5.20%
   QC value within limits for Mo 202.031  Recovery = 110.45%
Na 589.592 Radial†      1025.9      275.65 ug/L         5.589      275.65 ppb          5.589   2.03%
   QC value within limits for Na 589.592 Radial  Recovery = 91.88%
Ni 231.604†              233.5      5.6318 ug/L       0.21115      5.6318 ppb        0.21115   3.75%
   QC value within limits for Ni 231.604  Recovery = 112.64%
P 214.914†               272.0      154.36 ug/L         6.135      154.36 ppb          6.135   3.97%
   QC value within limits for P 214.914  Recovery = 102.90%
Pb 220.353†               84.0      9.9379 ug/L       0.72709      9.9379 ppb        0.72709   7.32%
   QC value within limits for Pb 220.353  Recovery = 99.38%
S 181.975 Axial†          82.7      110.77 ug/L         1.570      110.77 ppb          1.570   1.42%
   QC value within limits for S 181.975 Axial  Recovery = 110.77%
Sb 206.836†               30.1      10.283 ug/L        0.7194      10.283 ppb         0.7194   7.00%
   QC value within limits for Sb 206.836  Recovery = 102.83%
Se 196.026†               52.6      32.582 ug/L        2.9808      32.582 ppb         2.9808   9.15%
   QC value within limits for Se 196.026  Recovery = 108.61%
Si 251.611†             3486.2      105.33 ug/L         1.342      105.33 ppb          1.342   1.27%
   QC value within limits for Si 251.611  Recovery = 105.33%
Sn 189.927†               59.9      10.053 ug/L        0.5985      10.053 ppb         0.5985   5.95%
   QC value within limits for Sn 189.927  Recovery = 100.53%
Sr 421.552†              804.1      5.1449 ug/L       0.14413      5.1449 ppb        0.14413   2.80%
   QC value within limits for Sr 421.552  Recovery = 102.90%
Ti 334.940†             3412.3      5.1424 ug/L       0.08379      5.1424 ppb        0.08379   1.63%
   QC value within limits for Ti 334.940  Recovery = 102.85%
Tl 190.801†               67.9      19.693 ug/L        0.6398      19.693 ppb         0.6398   3.25%
   QC value within limits for Tl 190.801  Recovery = 98.46%
U 409.014†              1616.3      45.751 ug/L        1.6047      45.751 ppb         1.6047   3.51%
   QC value within limits for U 409.014  Recovery = 91.50%
V 292.402†               688.7      4.7593 ug/L       0.14891      4.7593 ppb        0.14891   3.13%
   QC value within limits for V 292.402  Recovery = 95.19%
Zn 213.857†             1257.3      11.269 ug/L        0.0351      11.269 ppb         0.0351   0.31%
   QC value within limits for Zn 213.857  Recovery = 112.69%
SiO2†                   3495.3      227.73 ug/L         1.356      227.73 ppb          1.356   0.60%
   QC value within limits for SiO2  Recovery = 106.91%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 1/18/2010 15:47:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4727.6	4727.6	88.7	%			15:49:00
1	Y RADIAL	4981.3	4981.3	88.24	%			15:49:00
1	Al 396.153Radial†	576197.2	649260.7	519550	ug/L	519550	ppb	15:48:55
1	Ca 317.933Radial†	257415.6	290038.1	479500	ug/L	479500	ppb	15:48:55
1	Fe 238.204 Radial†	19178.3	21597.5	186490	ug/L	186490	ppb	15:49:00
1	K 766.490 Radial†	2274.2	-112.8	-184.24	ug/L	-184.24	ppb	15:48:55
1	Mg 279.077 IEC†	13114.1	14774.5	486510	ug/L	486510	ppb	15:49:00
1	Na 589.592 Radial†	-949.8	28.4	7.6281	ug/L	7.6281	ppb	15:49:00
1	Sr 421.552†	538.5	595.1	0.2282	ug/L	0.2282	ppb	15:49:00
1	Sc 361.383	800596.7	800596.7	84.796	%			15:49:27
1	Y 371.029	662121.5	662121.5	83.038	%			15:49:27
1	Ag 328.068†	-9981.8	-12182.9	0.3590	ug/L	0.3590	ppb	15:49:27
1	As 188.979†	-77.1	-71.3	14.504	ug/L	14.504	ppb	15:49:47
1	B 249.677†	274.0	850.6	-11.833	ug/L	-11.833	ppb	15:49:27
1	Ba 233.527†	-570.1	-692.0	0.6484	ug/L	0.6484	ppb	15:49:47
1	Be 313.107†	-4304.5	-545.6	-0.2506	ug/L	-0.2506	ppb	15:49:27
1	Cd 226.502†	1282.0	1728.7	-0.8004	ug/L	-0.8004	ppb	15:49:47
1	Co 228.616†	-13.4	57.6	-1.5612	ug/L	-1.5612	ppb	15:49:47
1	Cr 267.716†	-119.0	-220.4	1.2253	ug/L	1.2253	ppb	15:49:47
1	Cu 324.752†	2829.5	-2829.6	1.6121	ug/L	1.6121	ppb	15:49:27
1	Mn 257.610†	-388.1	-913.2	-2.4472	ug/L	-2.4472	ppb	15:49:27
1	Mo 202.031†	-217.5	-275.3	1.6939	ug/L	1.6939	ppb	15:49:47
1	Ni 231.604†	253.9	198.9	4.7987	ug/L	4.7987	ppb	15:49:47
1	P 214.914†	167.4	-37.1	-41.081	ug/L	-41.081	ppb	15:49:47
1	Pb 220.353†	-822.8	-916.6	-5.5605	ug/L	-5.5605	ppb	15:49:47
1	S 181.975 Axial†	75.0	47.0	-34.424	ug/L	-34.424	ppb	15:49:47
1	Sb 206.836†	73.4	47.9	5.0494	ug/L	5.0494	ppb	15:49:47
1	Se 196.026†	-1003.4	-1150.4	24.727	ug/L	24.727	ppb	15:49:47
1	Si 251.611†	500.3	92.8	3.0352	ug/L	3.0352	ppb	15:49:47
1	Sn 189.927†	-369.3	-443.0	1.8564	ug/L	1.8564	ppb	15:49:47
1	Ti 334.940†	-15366.6	-16733.1	-0.7696	ug/L	-0.7696	ppb	15:49:27
1	Tl 190.801†	-69.9	-43.7	-12.879	ug/L	-12.879	ppb	15:49:47
1	U 409.014†	-736.2	776.7	0.7393	ug/L	0.7393	ppb	15:49:27
1	V 292.402†	701.5	2304.8	-2.8004	ug/L	-2.8004	ppb	15:49:47
1	Zn 213.857†	3115.9	2966.9	8.6202	ug/L	8.6202	ppb	15:49:47
1	SiO2†	578.6	157.4	10.769	ug/L	10.769	ppb	15:50:44
2	Sc Radial	4817.5	4817.5	90.4	%			15:49:10
2	Y RADIAL	5066.1	5066.1	89.75	%			15:49:10
2	Al 396.153Radial†	584735.7	646586.7	517410	ug/L	517410	ppb	15:49:05
2	Ca 317.933Radial†	260779.8	288345.5	476700	ug/L	476700	ppb	15:49:05
2	Fe 238.204 Radial†	19503.9	21554.3	186120	ug/L	186120	ppb	15:49:10
2	K 766.490 Radial†	2204.4	-237.8	-209.75	ug/L	-209.75	ppb	15:49:05
2	Mg 279.077 IEC†	13372.3	14784.2	486830	ug/L	486830	ppb	15:49:10
2	Na 589.592 Radial†	-924.9	76.0	20.407	ug/L	20.407	ppb	15:49:10
2	Sr 421.552†	564.0	612.0	0.3572	ug/L	0.3572	ppb	15:49:10
2	Sc 361.383	797376.9	797376.9	84.455	%			15:49:53
2	Y 371.029	659611.3	659611.3	82.723	%			15:49:53
2	Ag 328.068†	-9884.4	-12115.0	0.5774	ug/L	0.5774	ppb	15:49:53
2	As 188.979†	-86.1	-82.3	9.9401	ug/L	9.9401	ppb	15:50:13
2	B 249.677†	380.2	977.7	-9.0155	ug/L	-9.0155	ppb	15:49:53
2	Ba 233.527†	-593.0	-721.8	0.4207	ug/L	0.4207	ppb	15:50:13
2	Be 313.107†	-4216.3	-461.6	-0.2206	ug/L	-0.2206	ppb	15:49:53
2	Cd 226.502†	1272.9	1724.1	-0.8116	ug/L	-0.8116	ppb	15:50:13
2	Co 228.616†	-18.6	51.3	-1.6789	ug/L	-1.6789	ppb	15:50:13
2	Cr 267.716†	-42.3	-130.2	2.2062	ug/L	2.2062	ppb	15:50:13
2	Cu 324.752†	2873.9	-2763.6	1.7842	ug/L	1.7842	ppb	15:49:53
2	Mn 257.610†	-439.5	-976.0	-2.5636	ug/L	-2.5636	ppb	15:49:53
2	Mo 202.031†	-216.6	-275.3	1.6326	ug/L	1.6326	ppb	15:50:13
2	Ni 231.604†	229.7	171.4	4.1357	ug/L	4.1357	ppb	15:50:13

2	P 214.914†	161.4	-43.5	-44.990 ug/L	-44.990 ppb	15:50:13
2	Pb 220.353†	-808.5	-903.6	-4.5096 ug/L	-4.5096 ppb	15:50:13
2	S 181.975 Axial†	63.9	34.1	-51.198 ug/L	-51.198 ppb	15:50:13
2	Sb 206.836†	58.4	30.4	-0.6353 ug/L	-0.6353 ppb	15:50:13
2	Se 196.026†	-986.6	-1135.3	32.357 ug/L	32.357 ppb	15:50:13
2	Si 251.611†	496.1	90.3	2.9598 ug/L	2.9598 ppb	15:50:13
2	Sn 189.927†	-361.5	-435.5	2.6732 ug/L	2.6732 ppb	15:50:13
2	Ti 334.940†	-15240.2	-16656.7	-1.0564 ug/L	-1.0564 ppb	15:49:53
2	Tl 190.801†	-95.5	-74.3	-21.729 ug/L	-21.729 ppb	15:50:13
2	U 409.014†	-702.2	813.5	1.8210 ug/L	1.8210 ppb	15:49:53
2	V 292.402†	819.7	2448.1	-1.7962 ug/L	-1.7962 ppb	15:50:13
2	Zn 213.857†	3144.1	3015.2	9.0950 ug/L	9.0950 ppb	15:50:13
2	SiO2†	401.2	-49.9	-2.7522 ug/L	-2.7522 ppb	15:50:49
3	Sc Radial	4749.8	4749.8	89.2 %		15:49:20
3	Y RADIAL	4999.7	4999.7	88.57 %		15:49:20
3	Al 396.153Radial†	585388.9	656541.1	525370 ug/L	525370 ppb	15:49:15
3	Ca 317.933Radial†	260407.0	292040.1	482800 ug/L	482800 ppb	15:49:15
3	Fe 238.204 Radial†	19149.1	21463.9	185340 ug/L	185340 ppb	15:49:20
3	K 766.490 Radial†	2155.4	-258.0	-216.06 ug/L	-216.06 ppb	15:49:15
3	Mg 279.077 IEC†	13134.8	14728.7	485000 ug/L	485000 ppb	15:49:20
3	Na 589.592 Radial†	-967.8	13.3	3.5620 ug/L	3.5620 ppb	15:49:20
3	Sr 421.552†	557.2	613.3	0.3200 ug/L	0.3200 ppb	15:49:20
3	Sc 361.383	792968.8	792968.8	83.988 %		15:50:18
3	Y 371.029	655879.2	655879.2	82.255 %		15:50:18
3	Ag 328.068†	-9780.3	-12056.2	0.5020 ug/L	0.5020 ppb	15:50:18
3	As 188.979†	-91.6	-89.4	6.8660 ug/L	6.8660 ppb	15:50:38
3	B 249.677†	322.4	911.4	-10.327 ug/L	-10.327 ppb	15:50:18
3	Ba 233.527†	-623.7	-762.3	0.1002 ug/L	0.1002 ppb	15:50:38
3	Be 313.107†	-4217.1	-490.4	-0.2306 ug/L	-0.2306 ppb	15:50:18
3	Cd 226.502†	1272.7	1732.2	-0.6460 ug/L	-0.6460 ppb	15:50:38
3	Co 228.616†	-13.0	57.9	-1.5383 ug/L	-1.5383 ppb	15:50:38
3	Cr 267.716†	-90.8	-188.2	1.5575 ug/L	1.5575 ppb	15:50:38
3	Cu 324.752†	2993.8	-2601.9	2.2165 ug/L	2.2165 ppb	15:50:18
3	Mn 257.610†	-229.9	-729.3	-2.3048 ug/L	-2.3048 ppb	15:50:18
3	Mo 202.031†	-211.4	-270.4	1.9697 ug/L	1.9697 ppb	15:50:38
3	Ni 231.604†	210.4	150.0	3.6191 ug/L	3.6191 ppb	15:50:38
3	P 214.914†	198.4	1.6	-16.556 ug/L	-16.556 ppb	15:50:38
3	Pb 220.353†	-807.1	-907.2	-3.0377 ug/L	-3.0377 ppb	15:50:38
3	S 181.975 Axial†	59.0	28.8	-59.915 ug/L	-59.915 ppb	15:50:38
3	Sb 206.836†	70.6	45.4	4.0117 ug/L	4.0117 ppb	15:50:38
3	Se 196.026†	-1006.2	-1165.1	12.446 ug/L	12.446 ppb	15:50:38
3	Si 251.611†	484.9	80.2	2.6503 ug/L	2.6503 ppb	15:50:38
3	Sn 189.927†	-374.3	-453.1	0.6427 ug/L	0.6427 ppb	15:50:38
3	Ti 334.940†	-15111.2	-16603.4	-0.0051 ug/L	-0.0051 ppb	15:50:18
3	Tl 190.801†	-87.2	-65.1	-19.052 ug/L	-19.052 ppb	15:50:38
3	U 409.014†	-820.9	667.5	-2.2216 ug/L	-2.2216 ppb	15:50:18
3	V 292.402†	755.8	2377.4	-2.1858 ug/L	-2.1858 ppb	15:50:38
3	Zn 213.857†	3134.6	3024.5	9.2575 ug/L	9.2575 ppb	15:50:38
3	SiO2†	548.0	127.5	8.8149 ug/L	8.8149 ppb	15:50:54

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	796980.8	84.413	%	0.4056				0.48%
Sc Radial	4765.0	89.4	%	0.88				0.98%
Y 371.029	659204.0	82.672	%	0.3939				0.48%
Y RADIAL	5015.7	88.85	%	0.790				0.89%
Ag 328.068†	-12118.0	0.4795	ug/L	0.11095	0.4795	ppb	0.11095	23.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	650796.2	520770	ug/L	4122.5	520770	ppb	4122.5	0.79%
QC value within limits for Al 396.153Radial Recovery = 104.15%								
As 188.979†	-81.0	10.437	ug/L	3.8432	10.437	ppb	3.8432	36.82%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	913.2	-10.392	ug/L	1.4097	-10.392	ppb	1.4097	13.57%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-725.4	0.3898	ug/L	0.27538	0.3898	ppb	0.27538	70.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-499.2	-0.2339	ug/L	0.01526	-0.2339	ppb	0.01526	6.53%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	290141.3	479670	ug/L	3057.5	479670	ppb	3057.5	0.64%

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   QC value within limits for Ca 317.933Radial  Recovery = 95.93%
Cd 226.502†            1728.3     -0.7527 ug/L       0.09253     -0.7527 ppb        0.09253  12.29%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              55.6     -1.5928 ug/L       0.07544     -1.5928 ppb        0.07544   4.74%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -179.6      1.6630 ug/L       0.49889      1.6630 ppb        0.49889  30.00%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2731.7      1.8710 ug/L       0.31140      1.8710 ppb        0.31140  16.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    21538.6      185980 ug/L         588.5      185980 ppb          588.5   0.32%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.99%
K 766.490 Radial†      -202.9     -203.35 ug/L        16.847     -203.35 ppb         16.847   8.28%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       14762.5      486110 ug/L         976.1      486110 ppb          976.1   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.22%
Mn 257.610†            -872.8     -2.4385 ug/L       0.12963     -2.4385 ppb        0.12963   5.32%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -273.7      1.7654 ug/L       0.17952      1.7654 ppb        0.17952  10.17%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       39.2      10.533 ug/L        8.7903      10.533 ppb         8.7903  83.46%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             173.5      4.1845 ug/L       0.59128      4.1845 ppb        0.59128  14.13%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -26.3     -34.209 ug/L       15.4126     -34.209 ppb        15.4126  45.05%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -909.1     -4.3693 ug/L       1.26726     -4.3693 ppb        1.26726  29.00%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         36.6     -48.512 ug/L       12.9562     -48.512 ppb        12.9562  26.71%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              41.2      2.8086 ug/L       3.02728      2.8086 ppb        3.02728 107.79%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           -1150.3      23.177 ug/L       10.0453      23.177 ppb        10.0453  43.34%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              87.8      2.8818 ug/L       0.20395      2.8818 ppb        0.20395   7.08%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -443.9      1.7241 ug/L       1.02172      1.7241 ppb        1.02172  59.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             606.8      0.3018 ug/L       0.06638      0.3018 ppb        0.06638  21.99%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -16664.4     -0.6104 ug/L       0.54342     -0.6104 ppb        0.54342  89.03%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -61.0     -17.887 ug/L        4.5383     -17.887 ppb         4.5383  25.37%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              752.6      0.1129 ug/L       2.09284      0.1129 ppb        2.09284 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2376.8     -2.2608 ug/L       0.50627     -2.2608 ppb        0.50627  22.39%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            3002.2      8.9909 ug/L       0.33117      8.9909 ppb        0.33117   3.68%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   78.3      5.6107 ug/L       7.30816      5.6107 ppb        7.30816 130.25%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 1/18/2010 15:53:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4705.2	4705.2	88.3	%			15:55:02
1	Y RADIAL	4971.8	4971.8	88.08	%			15:55:02
1	Al 396.153Radial†	592151.3	670414.7	536450	ug/L	536450	ppb	15:54:57
1	Ca 317.933Radial†	261434.3	295969.0	489300	ug/L	489300	ppb	15:54:57
1	Fe 238.204 Radial†	19033.9	21536.8	185980	ug/L	185980	ppb	15:55:02
1	K 766.490 Radial†	25269.6	25934.1	5318.8	ug/L	5318.8	ppb	15:54:57
1	Mg 279.077 IEC†	13158.0	14894.5	490470	ug/L	490470	ppb	15:55:02
1	Na 589.592 Radial†	16522.6	19805.2	5321.4	ug/L	5321.4	ppb	15:55:02
1	Sr 421.552†	71894.8	81385.9	517.22	ug/L	517.22	ppb	15:54:57
1	Sc 361.383	806665.4	806665.4	85.438	%			15:55:30
1	Y 371.029	665247.9	665247.9	83.430	%			15:55:30
1	Ag 328.068†	42575.7	49420.9	272.53	ug/L	272.53	ppb	15:55:30
1	As 188.979†	967.0	1151.4	514.93	ug/L	514.93	ppb	15:55:50
1	B 249.677†	20711.1	24768.4	505.92	ug/L	505.92	ppb	15:55:30
1	Ba 233.527†	57165.2	66888.5	495.83	ug/L	495.83	ppb	15:55:30
1	Be 313.107†	590960.9	696212.2	247.47	ug/L	247.47	ppb	15:55:30
1	Cd 226.502†	38196.7	44923.6	460.77	ug/L	460.77	ppb	15:55:50
1	Co 228.616†	19409.3	22790.7	442.15	ug/L	442.15	ppb	15:55:50
1	Cr 267.716†	37967.4	44358.3	489.49	ug/L	489.49	ppb	15:55:30
1	Cu 324.752†	165143.1	187122.8	554.91	ug/L	554.91	ppb	15:55:30
1	Mn 257.610†	390718.4	456854.9	481.84	ug/L	481.84	ppb	15:55:30
1	Mo 202.031†	6053.6	7066.6	494.84	ug/L	494.84	ppb	15:55:50
1	Ni 231.604†	15994.6	18620.1	448.98	ug/L	448.98	ppb	15:55:50
1	P 214.914†	3939.3	4376.1	2397.1	ug/L	2397.1	ppb	15:55:50
1	Pb 220.353†	2570.7	3062.6	466.94	ug/L	466.94	ppb	15:55:50
1	S 181.975 Axial†	1751.5	2008.5	2591.9	ug/L	2591.9	ppb	15:55:50
1	Sb 206.836†	1429.5	1634.4	544.87	ug/L	544.87	ppb	15:55:50
1	Se 196.026†	2524.3	2987.5	2564.2	ug/L	2564.2	ppb	15:55:50
1	Si 251.611†	148409.8	173206.9	5234.0	ug/L	5234.0	ppb	15:55:30
1	Sn 189.927†	2145.4	2503.6	496.56	ug/L	496.56	ppb	15:55:50
1	Ti 334.940†	273152.2	321095.7	511.03	ug/L	511.03	ppb	15:55:30
1	Tl 190.801†	1290.5	1549.2	451.16	ug/L	451.16	ppb	15:55:50
1	U 409.014†	14367.6	18461.3	500.50	ug/L	500.50	ppb	15:55:30
1	V 292.402†	66579.3	79404.3	511.43	ug/L	511.43	ppb	15:55:30
1	Zn 213.857†	50339.1	58210.9	502.80	ug/L	502.80	ppb	15:55:30
1	SiO2†	147631.0	172267.5	11226	ug/L	11226	ppb	15:56:48
2	Sc Radial	4726.9	4726.9	88.7	%			15:55:12
2	Y RADIAL	4981.9	4981.9	88.26	%			15:55:12
2	Al 396.153Radial†	594627.1	670130.0	536220	ug/L	536220	ppb	15:55:07
2	Ca 317.933Radial†	262797.3	296147.5	489600	ug/L	489600	ppb	15:55:07
2	Fe 238.204 Radial†	19096.3	21508.3	185740	ug/L	185740	ppb	15:55:12
2	K 766.490 Radial†	25422.0	25974.6	5327.3	ug/L	5327.3	ppb	15:55:07
2	Mg 279.077 IEC†	13114.3	14777.0	486590	ug/L	486590	ppb	15:55:12
2	Na 589.592 Radial†	16556.0	19757.0	5308.4	ug/L	5308.4	ppb	15:55:12
2	Sr 421.552†	72103.2	81247.4	516.33	ug/L	516.33	ppb	15:55:07
2	Sc 361.383	804935.2	804935.2	85.255	%			15:55:56
2	Y 371.029	664552.5	664552.5	83.343	%			15:55:56
2	Ag 328.068†	42689.3	49661.3	273.51	ug/L	273.51	ppb	15:55:56
2	As 188.979†	992.8	1184.1	528.17	ug/L	528.17	ppb	15:56:16
2	B 249.677†	20668.7	24770.9	506.02	ug/L	506.02	ppb	15:55:56
2	Ba 233.527†	57075.3	66926.9	496.11	ug/L	496.11	ppb	15:55:56
2	Be 313.107†	590379.7	697017.1	247.75	ug/L	247.75	ppb	15:55:56
2	Cd 226.502†	37911.5	44685.2	458.25	ug/L	458.25	ppb	15:56:16
2	Co 228.616†	19230.9	22630.3	439.02	ug/L	439.02	ppb	15:56:16
2	Cr 267.716†	37735.7	44182.0	487.56	ug/L	487.56	ppb	15:55:56
2	Cu 324.752†	164335.6	186591.2	553.35	ug/L	553.35	ppb	15:55:56
2	Mn 257.610†	389345.1	456227.1	481.31	ug/L	481.31	ppb	15:55:56
2	Mo 202.031†	6022.8	7045.6	493.41	ug/L	493.41	ppb	15:56:16
2	Ni 231.604†	15914.2	18566.1	447.68	ug/L	447.68	ppb	15:56:16

2	P 214.914†	3881.6	4318.4	2364.3 ug/L	2364.3 ppb	15:56:16
2	Pb 220.353†	2532.4	3024.2	462.40 ug/L	462.40 ppb	15:56:16
2	S 181.975 Axial†	1725.5	1982.4	2556.9 ug/L	2556.9 ppb	15:56:16
2	Sb 206.836†	1414.5	1620.4	540.17 ug/L	540.17 ppb	15:56:16
2	Se 196.026†	2488.1	2951.3	2541.1 ug/L	2541.1 ppb	15:56:16
2	Si 251.611†	147787.3	172850.1	5223.2 ug/L	5223.2 ppb	15:55:56
2	Sn 189.927†	2117.5	2476.2	492.01 ug/L	492.01 ppb	15:56:16
2	Ti 334.940†	272521.4	321043.0	511.31 ug/L	511.31 ppb	15:55:56
2	Tl 190.801†	1274.2	1533.4	446.57 ug/L	446.57 ppb	15:56:16
2	U 409.014†	14294.0	18411.1	499.11 ug/L	499.11 ppb	15:55:56
2	V 292.402†	66561.7	79551.2	512.34 ug/L	512.34 ppb	15:55:56
2	Zn 213.857†	50243.8	58225.8	502.97 ug/L	502.97 ppb	15:55:56
2	SiO2†	146763.8	171621.7	11183 ug/L	11183 ppb	15:56:53
3	Sc Radial	4748.9	4748.9	89.1 %		15:55:23
3	Y RADIAL	4984.3	4984.3	88.30 %		15:55:23
3	Al 396.153Radial†	585757.7	657082.3	525780 ug/L	525780 ppb	15:55:18
3	Ca 317.933Radial†	258216.2	289639.2	478840 ug/L	478840 ppb	15:55:18
3	Fe 238.204 Radial†	19119.9	21435.3	185100 ug/L	185100 ppb	15:55:23
3	K 766.490 Radial†	25163.2	25551.9	5241.5 ug/L	5241.5 ppb	15:55:18
3	Mg 279.077 IEC†	13146.6	14744.8	485540 ug/L	485540 ppb	15:55:23
3	Na 589.592 Radial†	16584.7	19703.0	5293.9 ug/L	5293.9 ppb	15:55:23
3	Sr 421.552†	70911.3	79534.7	505.45 ug/L	505.45 ppb	15:55:18
3	Sc 361.383	817213.7	817213.7	86.556 %		15:56:22
3	Y 371.029	674497.8	674497.8	84.590 %		15:56:22
3	Ag 328.068†	43159.5	49452.2	272.53 ug/L	272.53 ppb	15:56:22
3	As 188.979†	977.1	1148.4	513.52 ug/L	513.52 ppb	15:56:42
3	B 249.677†	21041.5	24837.4	507.57 ug/L	507.57 ppb	15:56:22
3	Ba 233.527†	57805.2	66764.3	494.90 ug/L	494.90 ppb	15:56:22
3	Be 313.107†	599531.5	697186.0	247.81 ug/L	247.81 ppb	15:56:22
3	Cd 226.502†	38199.1	44349.3	454.73 ug/L	454.73 ppb	15:56:42
3	Co 228.616†	19359.9	22440.5	435.32 ug/L	435.32 ppb	15:56:42
3	Cr 267.716†	38270.9	44135.3	487.03 ug/L	487.03 ppb	15:56:22
3	Cu 324.752†	167426.6	187266.1	555.28 ug/L	555.28 ppb	15:56:22
3	Mn 257.610†	394686.1	455536.0	480.56 ug/L	480.56 ppb	15:56:22
3	Mo 202.031†	6099.1	7027.7	492.03 ug/L	492.03 ppb	15:56:42
3	Ni 231.604†	16022.2	18410.3	443.93 ug/L	443.93 ppb	15:56:42
3	P 214.914†	3954.0	4333.6	2370.6 ug/L	2370.6 ppb	15:56:42
3	Pb 220.353†	2563.2	3015.1	458.96 ug/L	458.96 ppb	15:56:42
3	S 181.975 Axial†	1759.0	1990.7	2570.0 ug/L	2570.0 ppb	15:56:42
3	Sb 206.836†	1415.9	1597.2	532.73 ug/L	532.73 ppb	15:56:42
3	Se 196.026†	2509.7	2932.5	2525.9 ug/L	2525.9 ppb	15:56:42
3	Si 251.611†	150079.0	172893.3	5224.6 ug/L	5224.6 ppb	15:56:22
3	Sn 189.927†	2141.0	2466.1	488.66 ug/L	488.66 ppb	15:56:42
3	Ti 334.940†	276243.4	320540.4	509.19 ug/L	509.19 ppb	15:56:22
3	Tl 190.801†	1292.2	1531.6	446.08 ug/L	446.08 ppb	15:56:42
3	U 409.014†	14511.3	18410.2	499.16 ug/L	499.16 ppb	15:56:22
3	V 292.402†	67433.5	79385.3	511.30 ug/L	511.30 ppb	15:56:22
3	Zn 213.857†	50826.9	58014.1	501.15 ug/L	501.15 ppb	15:56:22
3	SiO2†	148613.5	171172.2	11154 ug/L	11154 ppb	15:56:58

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	809604.8	85.750	%	0.7039				0.82%
Sc Radial	4727.0	88.7	%	0.41				0.46%
Y 371.029	668099.4	83.788	%	0.6963				0.83%
Y RADIAL	4979.4	88.21	%	0.118				0.13%
Ag 328.068†	49511.4	272.86	ug/L	0.566	272.86	ppb	0.566	0.21%
QC value within limits for Ag 328.068 Recovery = 109.14%								
Al 396.153Radial†	665875.7	532820	ug/L	6094.8	532820	ppb	6094.8	1.14%
QC value within limits for Al 396.153Radial Recovery = 106.56%								
As 188.979†	1161.3	518.87	ug/L	8.083	518.87	ppb	8.083	1.56%
QC value within limits for As 188.979 Recovery = 103.77%								
B 249.677†	24792.3	506.50	ug/L	0.929	506.50	ppb	0.929	0.18%
QC value within limits for B 249.677 Recovery = 101.30%								
Ba 233.527†	66859.9	495.61	ug/L	0.634	495.61	ppb	0.634	0.13%
QC value within limits for Ba 233.527 Recovery = 99.12%								
Be 313.107†	696805.1	247.68	ug/L	0.183	247.68	ppb	0.183	0.07%
QC value within limits for Be 313.107 Recovery = 99.07%								
Ca 317.933Radial†	293918.6	485910	ug/L	6128.6	485910	ppb	6128.6	1.26%

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   QC value within limits for Ca 317.933Radial  Recovery = 97.18%
Cd 226.502†            44652.7      457.92 ug/L        3.036      457.92 ppb        3.036   0.66%
   QC value within limits for Cd 226.502  Recovery = 91.58%
Co 228.616†            22620.5      438.83 ug/L        3.417      438.83 ppb        3.417   0.78%
   QC value within limits for Co 228.616  Recovery = 87.77%
Cr 267.716†            44225.2      488.03 ug/L        1.294      488.03 ppb        1.294   0.27%
   QC value within limits for Cr 267.716  Recovery = 97.61%
Cu 324.752†           186993.4      554.51 ug/L        1.026      554.51 ppb        1.026   0.19%
   QC value within limits for Cu 324.752  Recovery = 110.90%
Fe 238.204 Radial†     21493.5      185610 ug/L        452.3      185610 ppb        452.3   0.24%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.80%
K 766.490 Radial†      25820.2      5295.9 ug/L        47.28      5295.9 ppb        47.28   0.89%
   QC value within limits for K 766.490 Radial  Recovery = 105.92%
Mg 279.077 IEC†        14805.4      487530 ug/L       2596.0      487530 ppb       2596.0   0.53%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.51%
Mn 257.610†           456206.0      481.23 ug/L        0.644      481.23 ppb        0.644   0.13%
   QC value within limits for Mn 257.610  Recovery = 96.25%
Mo 202.031†             7046.7      493.43 ug/L        1.402      493.43 ppb        1.402   0.28%
   QC value within limits for Mo 202.031  Recovery = 98.69%
Na 589.592 Radial†     19755.1      5307.9 ug/L        13.74      5307.9 ppb        13.74   0.26%
   QC value within limits for Na 589.592 Radial  Recovery = 106.16%
Ni 231.604†            18532.2      446.86 ug/L        2.626      446.86 ppb        2.626   0.59%
   QC value within limits for Ni 231.604  Recovery = 89.37%
P 214.914†              4342.7      2377.3 ug/L        17.41      2377.3 ppb        17.41   0.73%
   QC value within limits for P 214.914  Recovery = 95.09%
Pb 220.353†             3034.0      462.77 ug/L        4.003      462.77 ppb        4.003   0.87%
   QC value within limits for Pb 220.353  Recovery = 92.55%
S 181.975 Axial†        1993.9      2573.0 ug/L        17.67      2573.0 ppb        17.67   0.69%
   QC value within limits for S 181.975 Axial  Recovery = 102.92%
Sb 206.836†             1617.3      539.26 ug/L        6.124      539.26 ppb        6.124   1.14%
   QC value within limits for Sb 206.836  Recovery = 107.85%
Se 196.026†             2957.1      2543.7 ug/L        19.30      2543.7 ppb        19.30   0.76%
   QC value within limits for Se 196.026  Recovery = 101.75%
Si 251.611†           172983.4      5227.3 ug/L         5.88      5227.3 ppb         5.88   0.11%
   QC value within limits for Si 251.611  Recovery = 104.55%
Sn 189.927†             2482.0      492.41 ug/L        3.961      492.41 ppb        3.961   0.80%
   QC value within limits for Sn 189.927  Recovery = 98.48%
Sr 421.552†            80722.7      513.00 ug/L        6.554      513.00 ppb        6.554   1.28%
   QC value within limits for Sr 421.552  Recovery = 102.60%
Ti 334.940†           320893.1      510.51 ug/L        1.151      510.51 ppb        1.151   0.23%
   QC value within limits for Ti 334.940  Recovery = 102.10%
Tl 190.801†             1538.1      447.94 ug/L        2.800      447.94 ppb        2.800   0.63%
   QC value within limits for Tl 190.801  Recovery = 89.59%
U 409.014†             18427.5      499.59 ug/L        0.788      499.59 ppb        0.788   0.16%
   QC value within limits for U 409.014  Recovery = 99.92%
V 292.402†             79446.9      511.69 ug/L        0.564      511.69 ppb        0.564   0.11%
   QC value within limits for V 292.402  Recovery = 102.34%
Zn 213.857†            58150.3      502.31 ug/L        1.009      502.31 ppb        1.009   0.20%
   QC value within limits for Zn 213.857  Recovery = 100.46%
SiO2†                 171687.2       11188 ug/L         35.9       11188 ppb         35.9   0.32%
   QC value within limits for SiO2  Recovery = 104.61%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 1/18/2010 15:59:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4756.8	4756.8	89.3	%			16:01:07
1	Y RADIAL	5040.9	5040.9	89.30	%			16:01:07
1	Al 396.153Radial†	572987.9	641677.1	513480	ug/L	513480	ppb	16:01:02
1	Ca 317.933Radial†	255283.6	285868.2	472600	ug/L	472600	ppb	16:01:02
1	Fe 238.204 Radial†	45414.7	50846.5	439050	ug/L	439050	ppb	16:01:07
1	K 766.490 Radial†	3222.0	932.8	-162.11	ug/L	-162.11	ppb	16:01:02
1	Mg 279.077 IEC†	13078.0	14643.2	481920	ug/L	481920	ppb	16:01:07
1	Na 589.592 Radial†	1714723.5	1921395.3	516250	ug/L	516250	ppb	16:01:02
1	Sr 421.552†	801.0	885.4	2.1378	ug/L	2.1378	ppb	16:01:07
1	Sc 361.383	790510.0	790510.0	83.727	%			16:01:35
1	Y 371.029	655606.8	655606.8	82.221	%			16:01:35
1	Ag 328.068†	-23251.3	-28181.5	-0.0383	ug/L	-0.0383	ppb	16:01:35
1	As 188.979†	-187.5	-204.3	19.620	ug/L	19.620	ppb	16:01:55
1	B 249.677†	1216.7	1980.7	-28.343	ug/L	-28.343	ppb	16:01:35
1	Ba 233.527†	-1631.7	-1968.5	-0.9754	ug/L	-0.9754	ppb	16:01:55
1	Be 313.107†	-10973.1	-8575.0	-3.0924	ug/L	-3.0924	ppb	16:01:35
1	Cd 226.502†	3330.9	4195.2	2.3045	ug/L	2.3045	ppb	16:01:55
1	Co 228.616†	177.2	285.1	-0.8213	ug/L	-0.8213	ppb	16:01:55
1	Cr 267.716†	46.1	-25.0	2.4646	ug/L	2.4646	ppb	16:01:55
1	Cu 324.752†	32.1	-6128.1	-2.7651	ug/L	-2.7651	ppb	16:01:35
1	Mn 257.610†	-25167.8	-30514.8	-8.6559	ug/L	-8.6559	ppb	16:01:35
1	Mo 202.031†	-463.4	-572.3	1.2718	ug/L	1.2718	ppb	16:01:55
1	Ni 231.604†	322.2	284.3	6.8565	ug/L	6.8565	ppb	16:01:55
1	P 214.914†	579.5	457.6	40.470	ug/L	40.470	ppb	16:01:55
1	Pb 220.353†	-598.9	-661.6	-1.1823	ug/L	-1.1823	ppb	16:01:55
1	S 181.975 Axial†	82.3	56.7	-20.161	ug/L	-20.161	ppb	16:01:55
1	Sb 206.836†	49.7	20.6	2.1559	ug/L	2.1559	ppb	16:01:55
1	Se 196.026†	-2369.2	-2796.7	-96.606	ug/L	-96.606	ppb	16:01:55
1	Si 251.611†	-484.0	-1075.2	-32.053	ug/L	-32.053	ppb	16:01:55
1	Sn 189.927†	-385.1	-467.4	0.9664	ug/L	0.9664	ppb	16:01:55
1	Ti 334.940†	-15304.5	-16890.2	-8.0304	ug/L	-8.0304	ppb	16:01:35
1	Tl 190.801†	-88.3	-66.7	-19.709	ug/L	-19.709	ppb	16:01:55
1	U 409.014†	433593.8	519509.8	14662	ug/L	14662	ppb	16:01:35
1	V 292.402†	2116.8	4005.7	-0.6545	ug/L	-0.6545	ppb	16:01:35
1	Zn 213.857†	5912.3	6353.7	14.633	ug/L	14.633	ppb	16:01:55
1	SiO2†	-599.5	-1241.0	-79.913	ug/L	-79.913	ppb	16:02:52
2	Sc Radial	4672.9	4672.9	87.7	%			16:01:17
2	Y RADIAL	4951.1	4951.1	87.71	%			16:01:17
2	Al 396.153Radial†	568507.7	648099.9	518620	ug/L	518620	ppb	16:01:12
2	Ca 317.933Radial†	254153.9	289717.4	478970	ug/L	478970	ppb	16:01:12
2	Fe 238.204 Radial†	44512.4	50731.7	438060	ug/L	438060	ppb	16:01:17
2	K 766.490 Radial†	3133.5	896.8	-174.37	ug/L	-174.37	ppb	16:01:12
2	Mg 279.077 IEC†	12827.1	14620.4	481170	ug/L	481170	ppb	16:01:17
2	Na 589.592 Radial†	1705558.7	1945452.6	522720	ug/L	522720	ppb	16:01:12
2	Sr 421.552†	792.9	892.2	2.1338	ug/L	2.1338	ppb	16:01:17
2	Sc 361.383	794055.6	794055.6	84.103	%			16:02:01
2	Y 371.029	658213.4	658213.4	82.548	%			16:02:01
2	Ag 328.068†	-23491.8	-28343.5	-1.1570	ug/L	-1.1570	ppb	16:02:01
2	As 188.979†	-183.6	-198.7	21.676	ug/L	21.676	ppb	16:02:21
2	B 249.677†	1228.3	1988.0	-28.024	ug/L	-28.024	ppb	16:02:01
2	Ba 233.527†	-1721.1	-2066.1	-1.7214	ug/L	-1.7214	ppb	16:02:21
2	Be 313.107†	-10874.0	-8398.7	-3.0299	ug/L	-3.0299	ppb	16:02:01
2	Cd 226.502†	3292.2	4131.3	1.7239	ug/L	1.7239	ppb	16:02:21
2	Co 228.616†	205.1	317.2	-0.1857	ug/L	-0.1857	ppb	16:02:21
2	Cr 267.716†	91.8	29.1	3.0382	ug/L	3.0382	ppb	16:02:21
2	Cu 324.752†	-42.9	-6217.5	-3.0748	ug/L	-3.0748	ppb	16:02:01
2	Mn 257.610†	-25352.9	-30600.7	-8.8139	ug/L	-8.8139	ppb	16:02:01
2	Mo 202.031†	-493.5	-605.6	-0.9636	ug/L	-0.9636	ppb	16:02:21
2	Ni 231.604†	306.4	263.8	6.3601	ug/L	6.3601	ppb	16:02:21

2	P 214.914†	577.7	452.3	39.499	ug/L	39.499 ppb	16:02:21
2	Pb 220.353†	-605.1	-665.7	-0.3612	ug/L	-0.3612 ppb	16:02:21
2	S 181.975 Axial†	76.9	49.9	-30.289	ug/L	-30.289 ppb	16:02:21
2	Sb 206.836†	61.7	34.6	6.4720	ug/L	6.4720 ppb	16:02:21
2	Se 196.026†	-2344.5	-2754.7	-73.605	ug/L	-73.605 ppb	16:02:21
2	Si 251.611†	-524.0	-1120.2	-33.389	ug/L	-33.389 ppb	16:02:21
2	Sn 189.927†	-413.0	-498.6	-3.3012	ug/L	-3.3012 ppb	16:02:21
2	Ti 334.940†	-15332.7	-16842.1	-7.0404	ug/L	-7.0404 ppb	16:02:01
2	Tl 190.801†	-118.7	-102.4	-30.045	ug/L	-30.045 ppb	16:02:21
2	U 409.014†	435369.6	519308.9	14656	ug/L	14656 ppb	16:02:01
2	V 292.402†	2005.8	3862.4	-1.5095	ug/L	-1.5095 ppb	16:02:01
2	Zn 213.857†	5902.9	6311.0	14.348	ug/L	14.348 ppb	16:02:21
2	SiO2†	-467.6	-1080.9	-69.412	ug/L	-69.412 ppb	16:02:57
3	Sc Radial	4711.0	4711.0	88.4	%		16:01:28
3	Y RADIAL	5009.9	5009.9	88.75	%		16:01:28
3	Al 396.153Radial†	575872.6	651188.7	521090	ug/L	521090 ppb	16:01:23
3	Ca 317.933Radial†	256865.0	290440.8	480160	ug/L	480160 ppb	16:01:23
3	Fe 238.204 Radial†	44918.5	50780.8	438490	ug/L	438490 ppb	16:01:28
3	K 766.490 Radial†	3243.9	992.8	-154.95	ug/L	-154.95 ppb	16:01:23
3	Mg 279.077 IEC†	12895.0	14578.9	479800	ug/L	479800 ppb	16:01:28
3	Na 589.592 Radial†	1723370.2	1949875.4	523910	ug/L	523910 ppb	16:01:23
3	Sr 421.552†	797.1	889.7	2.1087	ug/L	2.1087 ppb	16:01:28
3	Sc 361.383	794794.1	794794.1	84.181	%		16:02:26
3	Y 371.029	657387.7	657387.7	82.445	%		16:02:26
3	Ag 328.068†	-23739.5	-28611.7	-2.2412	ug/L	-2.2412 ppb	16:02:26
3	As 188.979†	-184.6	-199.7	21.368	ug/L	21.368 ppb	16:02:46
3	B 249.677†	1355.0	2137.2	-24.854	ug/L	-24.854 ppb	16:02:26
3	Ba 233.527†	-1686.4	-2023.0	-1.3886	ug/L	-1.3886 ppb	16:02:46
3	Be 313.107†	-11034.2	-8577.0	-3.0935	ug/L	-3.0935 ppb	16:02:26
3	Cd 226.502†	3277.8	4110.7	1.4675	ug/L	1.4675 ppb	16:02:46
3	Co 228.616†	172.3	278.0	-0.9502	ug/L	-0.9502 ppb	16:02:46
3	Cr 267.716†	67.0	-0.5	2.7084	ug/L	2.7084 ppb	16:02:46
3	Cu 324.752†	6.8	-6158.4	-2.9036	ug/L	-2.9036 ppb	16:02:26
3	Mn 257.610†	-25363.8	-30585.6	-8.7003	ug/L	-8.7003 ppb	16:02:26
3	Mo 202.031†	-462.8	-568.6	1.5659	ug/L	1.5659 ppb	16:02:46
3	Ni 231.604†	291.3	245.5	5.9209	ug/L	5.9209 ppb	16:02:46
3	P 214.914†	572.2	445.2	35.701	ug/L	35.701 ppb	16:02:46
3	Pb 220.353†	-615.9	-677.8	-1.2725	ug/L	-1.2725 ppb	16:02:46
3	S 181.975 Axial†	107.7	86.4	18.190	ug/L	18.190 ppb	16:02:46
3	Sb 206.836†	64.7	38.1	7.6831	ug/L	7.6831 ppb	16:02:46
3	Se 196.026†	-2331.7	-2736.9	-60.856	ug/L	-60.856 ppb	16:02:46
3	Si 251.611†	-461.9	-1045.8	-31.168	ug/L	-31.168 ppb	16:02:46
3	Sn 189.927†	-393.7	-475.2	0.7997	ug/L	0.7997 ppb	16:02:46
3	Ti 334.940†	-15471.3	-16989.8	-7.0103	ug/L	-7.0103 ppb	16:02:26
3	Tl 190.801†	-109.4	-91.2	-26.800	ug/L	-26.800 ppb	16:02:46
3	U 409.014†	437023.1	520792.1	14698	ug/L	14698 ppb	16:02:26
3	V 292.402†	2276.5	4181.8	0.6182	ug/L	0.6182 ppb	16:02:26
3	Zn 213.857†	5873.7	6269.8	13.938	ug/L	13.938 ppb	16:02:46
3	SiO2†	-525.3	-1149.0	-73.920	ug/L	-73.920 ppb	16:03:02

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	793119.9	84.004	%	0.2426				0.29%
Sc Radial	4713.6	88.5	%	0.79				0.89%
Y 371.029	657069.3	82.405	%	0.1671				0.20%
Y RADIAL	5000.6	88.59	%	0.807				0.91%
Ag 328.068†	-28378.9	-1.1455	ug/L	1.10152	-1.1455	ppb	1.10152	96.16%
Al 396.153Radial†	646988.5	517730	ug/L	3882.8	517730	ppb	3882.8	0.75%
QC value within limits for Al 396.153Radial Recovery = 103.55%								
As 188.979†	-200.9	20.888	ug/L	1.1093	20.888	ppb	1.1093	5.31%
B 249.677†	2035.3	-27.074	ug/L	1.9286	-27.074	ppb	1.9286	7.12%
Ba 233.527†	-2019.2	-1.3618	ug/L	0.37374	-1.3618	ppb	0.37374	27.44%
Be 313.107†	-8516.9	-3.0719	ug/L	0.03642	-3.0719	ppb	0.03642	1.19%
Ca 317.933Radial†	288675.5	477240	ug/L	4063.5	477240	ppb	4063.5	0.85%
QC value within limits for Ca 317.933Radial Recovery = 95.45%								
Cd 226.502†	4145.7	1.8320	ug/L	0.42885	1.8320	ppb	0.42885	23.41%
Co 228.616†	293.4	-0.6524	ug/L	0.40927	-0.6524	ppb	0.40927	62.73%
Cr 267.716†	1.2	2.7371	ug/L	0.28790	2.7371	ppb	0.28790	10.52%
Cu 324.752†	-6168.0	-2.9145	ug/L	0.15512	-2.9145	ppb	0.15512	5.32%

Fe 238.204 Radial†	50786.3	438530	ug/L	497.1	438530	ppb	497.1	0.11%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.71%								
K 766.490 Radial†	940.8	-163.81	ug/L	9.825	-163.81	ppb	9.825	6.00%
Mg 279.077 IEC†	14614.2	480960	ug/L	1073.5	480960	ppb	1073.5	0.22%
QC value within limits for Mg 279.077 IEC Recovery = 96.19%								
Mn 257.610†	-30567.1	-8.7234	ug/L	0.08148	-8.7234	ppb	0.08148	0.93%
Mo 202.031†	-582.2	0.6247	ug/L	1.38337	0.6247	ppb	1.38337	221.45%
Na 589.592 Radial†	1938907.8	520960	ug/L	4118.1	520960	ppb	4118.1	0.79%
QC value within limits for Na 589.592 Radial Recovery = 104.19%								
Ni 231.604†	264.5	6.3792	ug/L	0.46810	6.3792	ppb	0.46810	7.34%
P 214.914†	451.7	38.557	ug/L	2.5202	38.557	ppb	2.5202	6.54%
Pb 220.353†	-668.4	-0.9387	ug/L	0.50213	-0.9387	ppb	0.50213	53.49%
S 181.975 Axial†	64.4	-10.753	ug/L	25.5725	-10.753	ppb	25.5725	237.81%
Sb 206.836†	31.1	5.4370	ug/L	2.90532	5.4370	ppb	2.90532	53.44%
Se 196.026†	-2762.8	-77.022	ug/L	18.1181	-77.022	ppb	18.1181	23.52%
Si 251.611†	-1080.4	-32.203	ug/L	1.1181	-32.203	ppb	1.1181	3.47%
Sn 189.927†	-480.4	-0.5117	ug/L	2.41722	-0.5117	ppb	2.41722	472.40%
Sr 421.552†	889.1	2.1268	ug/L	0.01579	2.1268	ppb	0.01579	0.74%
Ti 334.940†	-16907.3	-7.3604	ug/L	0.58050	-7.3604	ppb	0.58050	7.89%
Tl 190.801†	-86.8	-25.518	ug/L	5.2856	-25.518	ppb	5.2856	20.71%
U 409.014†	519870.3	14672	ug/L	22.8	14672	ppb	22.8	0.16%
QC value within limits for U 409.014 Recovery = 97.81%								
V 292.402†	4016.7	-0.5153	ug/L	1.07063	-0.5153	ppb	1.07063	207.78%
Zn 213.857†	6311.5	14.306	ug/L	0.3495	14.306	ppb	0.3495	2.44%
SiO2†	-1157.0	-74.415	ug/L	5.2679	-74.415	ppb	5.2679	7.08%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 1/18/2010 16:05:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5110.9	5110.9	95.9	%			16:07:10
1	Y RADIAL	5382.9	5382.9	95.36	%			16:07:10
1	Al 396.153Radial†	562.8	582.0	-7.0301	ug/L	-7.0301	ppb	16:07:10
1	Ca 317.933Radial†	31.9	12.6	20.894	ug/L	20.894	ppb	16:07:30
1	Fe 238.204 Radial†	-19.2	-32.8	-1.0188	ug/L	-1.0188	ppb	16:07:30
1	K 766.490 Radial†	1353026.3	1407594.3	297710	ug/L	297710	ppb	16:07:05
1	Mg 279.077 IEC†	-4.9	-7.8	-154.08	ug/L	-154.08	ppb	16:07:30
1	Na 589.592 Radial†	-300.7	785.2	210.98	ug/L	210.98	ppb	16:07:10
1	Sr 421.552†	1509869.6	1573737.1	10072	ug/L	10072	ppb	16:07:05
1	Sc 361.383	889855.8	889855.8	94.249	%			16:08:47
1	Y 371.029	735798.1	735798.1	92.278	%			16:08:47
1	Ag 328.068†	-7309.0	-8166.1	4.8971	ug/L	4.8971	ppb	16:08:52
1	As 188.979†	23142.8	24574.4	10056	ug/L	10056	ppb	16:08:52
1	B 249.677†	218196.8	232037.4	5007.5	ug/L	5007.5	ppb	16:08:47
1	Ba 233.527†	1855524.3	1968717.6	14416	ug/L	14416	ppb	16:08:47
1	Be 313.107†	7696451.3	8170573.5	2913.6	ug/L	2913.6	ppb	16:08:40
1	Cd 226.502†	857470.5	910005.1	9721.3	ug/L	9721.3	ppb	16:08:47
1	Co 228.616†	455487.4	483351.9	9430.1	ug/L	9430.1	ppb	16:08:52
1	Cr 267.716†	2091894.6	2219449.4	24298	ug/L	24298	ppb	16:08:47
1	Cu 324.752†	6518833.3	6910407.1	20140	ug/L	20140	ppb	16:08:40
1	Mn 257.610†	8454642.1	8970038.3	9493.8	ug/L	9493.8	ppb	16:08:40
1	Mo 202.031†	136823.0	145152.4	9748.1	ug/L	9748.1	ppb	16:08:52
1	Ni 231.604†	384055.6	407387.8	9823.5	ug/L	9823.5	ppb	16:08:47
1	P 214.914†	29536.8	31104.4	13992	ug/L	13992	ppb	16:08:52
1	Pb 220.353†	195773.5	207772.2	24436	ug/L	24436	ppb	16:08:52
1	S 181.975 Axial†	35854.1	38000.1	50940	ug/L	50940	ppb	16:08:52
1	Sb 206.836†	29725.9	31500.9	10739	ug/L	10739	ppb	16:08:52
1	Se 196.026†	15386.3	16358.0	10060	ug/L	10060	ppb	16:08:52
1	Si 251.611†	1488381.9	1578696.9	47639	ug/L	47639	ppb	16:08:47
1	Sn 189.927†	58573.0	62139.3	10401	ug/L	10401	ppb	16:08:52
1	Ti 334.940†	6106783.5	6480771.7	9798.0	ug/L	9798.0	ppb	16:08:40
1	Tl 190.801†	31326.8	33276.9	9683.7	ug/L	9683.7	ppb	16:08:52
1	U 409.014†	-610.3	997.4	-26.067	ug/L	-26.067	ppb	16:08:52
1	V 292.402†	1448998.5	1538885.3	10236	ug/L	10236	ppb	16:08:47
1	Zn 213.857†	1486472.5	1576460.5	14113	ug/L	14113	ppb	16:08:47
1	SiO2†	1518000.3	1610094.6	104770	ug/L	104770	ppb	16:09:38
2	Sc Radial	5134.7	5134.7	96.4	%			16:07:40
2	Y RADIAL	5385.6	5385.6	95.41	%			16:07:40
2	Al 396.153Radial†	566.9	583.5	-9.3425	ug/L	-9.3425	ppb	16:07:40
2	Ca 317.933Radial†	31.7	12.3	20.305	ug/L	20.305	ppb	16:08:00
2	Fe 238.204 Radial†	-21.8	-35.4	-21.249	ug/L	-21.249	ppb	16:08:00
2	K 766.490 Radial†	1340940.1	1388528.3	293670	ug/L	293670	ppb	16:07:35
2	Mg 279.077 IEC†	-3.1	-5.9	-90.607	ug/L	-90.607	ppb	16:08:00
2	Na 589.592 Radial†	-368.9	716.0	192.38	ug/L	192.38	ppb	16:07:40
2	Sr 421.552†	1495996.2	1552060.3	9933.2	ug/L	9933.2	ppb	16:07:35
2	Sc 361.383	889419.7	889419.7	94.203	%			16:09:07
2	Y 371.029	735106.5	735106.5	92.191	%			16:09:07
2	Ag 328.068†	-7399.7	-8266.2	4.4157	ug/L	4.4157	ppb	16:09:12
2	As 188.979†	23418.1	24878.7	10180	ug/L	10180	ppb	16:09:12
2	B 249.677†	218248.9	232206.2	5010.9	ug/L	5010.9	ppb	16:09:07
2	Ba 233.527†	1858146.4	1972466.4	14443	ug/L	14443	ppb	16:09:07
2	Be 313.107†	7709968.9	8188927.1	2920.1	ug/L	2920.1	ppb	16:09:00
2	Cd 226.502†	858799.4	911861.8	9741.1	ug/L	9741.1	ppb	16:09:07
2	Co 228.616†	459538.0	487888.7	9518.8	ug/L	9518.8	ppb	16:09:12
2	Cr 267.716†	2090379.1	2218929.0	24293	ug/L	24293	ppb	16:09:07
2	Cu 324.752†	6513466.7	6908101.7	20133	ug/L	20133	ppb	16:09:00
2	Mn 257.610†	8470498.1	8991268.5	9516.2	ug/L	9516.2	ppb	16:09:00
2	Mo 202.031†	137786.4	146246.2	9821.5	ug/L	9821.5	ppb	16:09:12
2	Ni 231.604†	384425.1	407979.9	9837.7	ug/L	9837.7	ppb	16:09:07

2	P 214.914†	29916.3	31522.6	14234	ug/L	14234 ppb	16:09:12
2	Pb 220.353†	197485.0	209690.8	24662	ug/L	24662 ppb	16:09:12
2	S 181.975 Axial†	36408.6	38607.5	51754	ug/L	51754 ppb	16:09:12
2	Sb 206.836†	30000.5	31807.8	10842	ug/L	10842 ppb	16:09:12
2	Se 196.026†	15494.3	16480.7	10135	ug/L	10135 ppb	16:09:12
2	Si 251.611†	1487786.5	1578839.2	47642	ug/L	47642 ppb	16:09:07
2	Sn 189.927†	58997.8	62620.7	10482	ug/L	10482 ppb	16:09:12
2	Ti 334.940†	6114288.9	6491916.0	9814.9	ug/L	9814.9 ppb	16:09:00
2	Tl 190.801†	31592.9	33575.7	9770.0	ug/L	9770.0 ppb	16:09:12
2	U 409.014†	-813.2	781.7	-32.161	ug/L	-32.161 ppb	16:09:12
2	V 292.402†	1446907.6	1537419.6	10227	ug/L	10227 ppb	16:09:07
2	Zn 213.857†	1486940.4	1577730.5	14124	ug/L	14124 ppb	16:09:07
2	SiO2†	1492983.5	1584328.2	103090	ug/L	103090 ppb	16:09:44
3	Sc Radial	5105.9	5105.9	95.8	%		16:08:11
3	Y RADIAL	5336.7	5336.7	94.54	%		16:08:11
3	Al 396.153Radial†	542.6	561.4	-23.106	ug/L	-23.106 ppb	16:08:11
3	Ca 317.933Radial†	29.7	10.4	17.241	ug/L	17.241 ppb	16:08:31
3	Fe 238.204 Radial†	-18.5	-32.1	5.0996	ug/L	5.0996 ppb	16:08:31
3	K 766.490 Radial†	1338427.9	1393738.7	294780	ug/L	294780 ppb	16:08:06
3	Mg 279.077 IEC†	-4.8	-7.7	-150.48	ug/L	-150.48 ppb	16:08:31
3	Na 589.592 Radial†	-430.6	649.5	174.50	ug/L	174.50 ppb	16:08:11
3	Sr 421.552†	1498290.3	1563190.8	10004	ug/L	10004 ppb	16:08:06
3	Sc 361.383	895638.8	895638.8	94.862	%		16:09:27
3	Y 371.029	739459.8	739459.8	92.737	%		16:09:27
3	Ag 328.068†	-7461.9	-8277.2	4.3067	ug/L	4.3067 ppb	16:09:32
3	As 188.979†	23345.4	24629.4	10080	ug/L	10080 ppb	16:09:32
3	B 249.677†	219616.4	232039.1	5007.5	ug/L	5007.5 ppb	16:09:27
3	Ba 233.527†	1869575.3	1970817.9	14431	ug/L	14431 ppb	16:09:27
3	Be 313.107†	7872612.6	8303549.5	2961.0	ug/L	2961.0 ppb	16:09:20
3	Cd 226.502†	864811.2	911869.0	9741.2	ug/L	9741.2 ppb	16:09:27
3	Co 228.616†	458802.1	483725.7	9437.1	ug/L	9437.1 ppb	16:09:32
3	Cr 267.716†	2103252.1	2217090.9	24273	ug/L	24273 ppb	16:09:27
3	Cu 324.752†	6681676.6	7037411.2	20510	ug/L	20510 ppb	16:09:20
3	Mn 257.610†	8644631.9	9112397.4	9644.5	ug/L	9644.5 ppb	16:09:20
3	Mo 202.031†	137606.3	145040.7	9740.6	ug/L	9740.6 ppb	16:09:32
3	Ni 231.604†	387362.0	408242.2	9844.1	ug/L	9844.1 ppb	16:09:27
3	P 214.914†	29833.4	31214.7	13982	ug/L	13982 ppb	16:09:32
3	Pb 220.353†	197351.1	208094.0	24473	ug/L	24473 ppb	16:09:32
3	S 181.975 Axial†	36254.3	38176.4	51176	ug/L	51176 ppb	16:09:32
3	Sb 206.836†	29978.1	31563.1	10758	ug/L	10758 ppb	16:09:32
3	Se 196.026†	15469.2	16340.0	10049	ug/L	10049 ppb	16:09:32
3	Si 251.611†	1496625.5	1577190.4	47593	ug/L	47593 ppb	16:09:27
3	Sn 189.927†	59035.8	62225.8	10416	ug/L	10416 ppb	16:09:32
3	Ti 334.940†	6248585.4	6588417.7	9960.9	ug/L	9960.9 ppb	16:09:20
3	Tl 190.801†	31566.2	33314.7	9696.7	ug/L	9696.7 ppb	16:09:32
3	U 409.014†	-387.2	1236.8	-19.232	ug/L	-19.232 ppb	16:09:32
3	V 292.402†	1454906.5	1535186.5	10211	ug/L	10211 ppb	16:09:27
3	Zn 213.857†	1496414.8	1576757.8	14115	ug/L	14115 ppb	16:09:27
3	SiO2†	1492134.7	1572428.5	102320	ug/L	102320 ppb	16:09:50

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891638.1	94.438	%	0.3677				0.39%
Sc Radial	5117.2	96.1	%	0.29				0.30%
Y 371.029	736788.1	92.402	%	0.2934				0.32%
Y RADIAL	5368.4	95.10	%	0.487				0.51%
Ag 328.068†	-8236.5	4.5399	ug/L	0.31417	4.5399	ppb	0.31417	6.92%
Al 396.153Radial†	575.6	-13.159	ug/L	8.6909	-13.159	ppb	8.6909	66.04%
As 188.979†	24694.2	10106	ug/L	65.6	10106	ppb	65.6	0.65%
QC value within limits for As 188.979 Recovery = 101.06%								
B 249.677†	232094.2	5008.6	ug/L	1.97	5008.6	ppb	1.97	0.04%
QC value within limits for B 249.677 Recovery = 100.17%								
Ba 233.527†	1970667.3	14430	ug/L	13.7	14430	ppb	13.7	0.10%
QC value within limits for Ba 233.527 Recovery = 96.20%								
Be 313.107†	8221016.7	2931.6	ug/L	25.70	2931.6	ppb	25.70	0.88%
QC value within limits for Be 313.107 Recovery = 97.72%								
Ca 317.933Radial†	11.8	19.480	ug/L	1.9611	19.480	ppb	1.9611	10.07%
Cd 226.502†	911245.3	9734.5	ug/L	11.47	9734.5	ppb	11.47	0.12%
QC value within limits for Cd 226.502 Recovery = 97.35%								

Co 228.616†	484988.8	9462.0 ug/L	49.31	9462.0 ppb	49.31	0.52%
QC value within limits for Co 228.616 Recovery = 94.62%						
Cr 267.716†	2218489.8	24288 ug/L	13.6	24288 ppb	13.6	0.06%
QC value within limits for Cr 267.716 Recovery = 97.15%						
Cu 324.752†	6951973.3	20261 ug/L	215.7	20261 ppb	215.7	1.06%
QC value within limits for Cu 324.752 Recovery = 101.31%						
Fe 238.204 Radial†	-33.4	-5.7226 ug/L	13.78957	-5.7226 ppb	13.78957	240.97%
K 766.490 Radial†	1396620.4	295380 ug/L	2084.3	295380 ppb	2084.3	0.71%
QC value within limits for K 766.490 Radial Recovery = 98.46%						
Mg 279.077 IEC†	-7.1	-131.72 ug/L	35.651	-131.72 ppb	35.651	27.07%
Mn 257.610†	9024568.1	9551.5 ug/L	81.29	9551.5 ppb	81.29	0.85%
QC value within limits for Mn 257.610 Recovery = 95.51%						
Mo 202.031†	145479.8	9770.1 ug/L	44.73	9770.1 ppb	44.73	0.46%
QC value within limits for Mo 202.031 Recovery = 97.70%						
Na 589.592 Radial†	716.9	192.62 ug/L	18.242	192.62 ppb	18.242	9.47%
Ni 231.604†	407870.0	9835.1 ug/L	10.55	9835.1 ppb	10.55	0.11%
QC value within limits for Ni 231.604 Recovery = 98.35%						
P 214.914†	31280.6	14069 ug/L	143.1	14069 ppb	143.1	1.02%
QC value within limits for P 214.914 Recovery = 93.80%						
Pb 220.353†	208519.0	24524 ug/L	120.9	24524 ppb	120.9	0.49%
QC value within limits for Pb 220.353 Recovery = 98.09%						
S 181.975 Axial†	38261.4	51290 ug/L	418.9	51290 ppb	418.9	0.82%
QC value within limits for S 181.975 Axial Recovery = 102.58%						
Sb 206.836†	31623.9	10780 ug/L	55.0	10780 ppb	55.0	0.51%
QC value within limits for Sb 206.836 Recovery = 107.80%						
Se 196.026†	16392.9	10082 ug/L	47.0	10082 ppb	47.0	0.47%
QC value within limits for Se 196.026 Recovery = 100.82%						
Si 251.611†	1578242.2	47625 ug/L	27.3	47625 ppb	27.3	0.06%
QC value within limits for Si 251.611 Recovery = 95.25%						
Sn 189.927†	62328.6	10433 ug/L	43.0	10433 ppb	43.0	0.41%
QC value within limits for Sn 189.927 Recovery = 104.33%						
Sr 421.552†	1562996.1	10003 ug/L	69.4	10003 ppb	69.4	0.69%
QC value within limits for Sr 421.552 Recovery = 100.03%						
Ti 334.940†	6520368.4	9858.0 ug/L	89.58	9858.0 ppb	89.58	0.91%
QC value within limits for Ti 334.940 Recovery = 98.58%						
Tl 190.801†	33389.1	9716.8 ug/L	46.49	9716.8 ppb	46.49	0.48%
QC value within limits for Tl 190.801 Recovery = 97.17%						
U 409.014†	1005.3	-25.820 ug/L	6.4685	-25.820 ppb	6.4685	25.05%
V 292.402†	1537163.8	10225 ug/L	12.5	10225 ppb	12.5	0.12%
QC value within limits for V 292.402 Recovery = 102.25%						
Zn 213.857†	1576982.9	14118 ug/L	6.1	14118 ppb	6.1	0.04%
QC value within limits for Zn 213.857 Recovery = 94.12%						
SiO2†	1588950.4	103390 ug/L	1256.2	103390 ppb	1256.2	1.21%
QC value within limits for SiO2 Recovery = 96.63%						

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/18/2010 16:12:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5362.7	5362.7	101	%			16:13:52
1	Y RADIAL	5609.6	5609.6	99.38	%			16:13:52
1	Al 396.153Radial†	6268.3	6222.0	4955.2	ug/L	4955.2	ppb	16:13:52
1	Ca 317.933Radial†	2992.9	2952.5	4881.1	ug/L	4881.1	ppb	16:14:12
1	Fe 238.204 Radial†	583.6	567.0	4910.3	ug/L	4910.3	ppb	16:14:12
1	K 766.490 Radial†	26930.5	24076.4	5086.2	ug/L	5086.2	ppb	16:13:52
1	Mg 279.077 IEC†	158.0	154.3	5082.9	ug/L	5082.9	ppb	16:14:12
1	Na 589.592 Radial†	35229.1	36094.0	9698.0	ug/L	9698.0	ppb	16:13:52
1	Sr 421.552†	77575.4	77049.1	493.08	ug/L	493.08	ppb	16:13:52
1	Sc 361.383	934450.0	934450.0	98.973	%			16:15:09
1	Y 371.029	779522.9	779522.9	97.762	%			16:15:09
1	Ag 328.068†	111570.2	112317.0	496.91	ug/L	496.91	ppb	16:15:14
1	As 188.979†	1240.0	1272.4	521.69	ug/L	521.69	ppb	16:15:34
1	B 249.677†	23121.5	23889.0	516.10	ug/L	516.10	ppb	16:15:14
1	Ba 233.527†	66942.8	67617.9	495.59	ug/L	495.59	ppb	16:15:14
1	Be 313.107†	1385660.5	1404574.2	498.14	ug/L	498.14	ppb	16:15:09
1	Cd 226.502†	45449.8	46138.4	492.47	ug/L	492.47	ppb	16:15:14
1	Co 228.616†	24937.2	25269.5	493.16	ug/L	493.16	ppb	16:15:14
1	Cr 267.716†	44762.7	45147.2	494.58	ug/L	494.58	ppb	16:15:14
1	Cu 324.752†	173450.1	169084.0	492.77	ug/L	492.77	ppb	16:15:14
1	Mn 257.610†	466960.7	471352.1	499.15	ug/L	499.15	ppb	16:15:09
1	Mo 202.031†	7231.5	7287.8	489.87	ug/L	489.87	ppb	16:15:34
1	Ni 231.604†	20342.8	20453.5	493.19	ug/L	493.19	ppb	16:15:14
1	P 214.914†	4400.1	4211.2	2326.7	ug/L	2326.7	ppb	16:15:34
1	Pb 220.353†	4092.7	4189.0	494.02	ug/L	494.02	ppb	16:15:34
1	S 181.975 Axial†	755.4	721.7	966.51	ug/L	966.51	ppb	16:15:34
1	Sb 206.836†	1506.1	1483.1	506.14	ug/L	506.14	ppb	16:15:34
1	Se 196.026†	757.7	798.5	509.07	ug/L	509.07	ppb	16:15:34
1	Si 251.611†	81859.5	82212.0	2481.1	ug/L	2481.1	ppb	16:15:14
1	Sn 189.927†	2887.1	2909.6	487.85	ug/L	487.85	ppb	16:15:34
1	Ti 334.940†	316299.8	320971.7	485.55	ug/L	485.55	ppb	16:15:14
1	Tl 190.801†	1648.3	1704.1	495.84	ug/L	495.84	ppb	16:15:34
1	U 409.014†	15482.3	17288.0	487.90	ug/L	487.90	ppb	16:15:14
1	V 292.402†	72890.3	75124.4	500.43	ug/L	500.43	ppb	16:15:14
1	Zn 213.857†	55213.4	55078.8	491.94	ug/L	491.94	ppb	16:15:14
1	SiO2†	81757.1	82080.8	5341.5	ug/L	5341.5	ppb	16:16:42
2	Sc Radial	5203.2	5203.2	97.7	%			16:14:17
2	Y RADIAL	5479.6	5479.6	97.07	%			16:14:17
2	Al 396.153Radial†	6152.9	6294.9	5013.4	ug/L	5013.4	ppb	16:14:17
2	Ca 317.933Radial†	2994.0	3044.7	5033.6	ug/L	5033.6	ppb	16:14:37
2	Fe 238.204 Radial†	583.9	584.9	5065.8	ug/L	5065.8	ppb	16:14:37
2	K 766.490 Radial†	26559.1	24516.4	5179.2	ug/L	5179.2	ppb	16:14:17
2	Mg 279.077 IEC†	157.6	158.8	5229.6	ug/L	5229.6	ppb	16:14:37
2	Na 589.592 Radial†	34388.5	36306.6	9755.1	ug/L	9755.1	ppb	16:14:17
2	Sr 421.552†	76138.1	77940.6	498.78	ug/L	498.78	ppb	16:14:17
2	Sc 361.383	934061.4	934061.4	98.932	%			16:15:40
2	Y 371.029	780599.5	780599.5	97.897	%			16:15:40
2	Ag 328.068†	111490.8	112283.8	496.82	ug/L	496.82	ppb	16:15:45
2	As 188.979†	1233.6	1266.5	519.32	ug/L	519.32	ppb	16:16:05
2	B 249.677†	23017.1	23793.2	513.99	ug/L	513.99	ppb	16:15:45
2	Ba 233.527†	67141.6	67847.1	497.28	ug/L	497.28	ppb	16:15:45
2	Be 313.107†	1387049.6	1406560.8	498.84	ug/L	498.84	ppb	16:15:40
2	Cd 226.502†	45678.9	46389.1	495.13	ug/L	495.13	ppb	16:15:45
2	Co 228.616†	25006.7	25350.1	494.74	ug/L	494.74	ppb	16:15:45
2	Cr 267.716†	45062.2	45468.8	498.10	ug/L	498.10	ppb	16:15:45
2	Cu 324.752†	173281.2	168986.2	492.49	ug/L	492.49	ppb	16:15:45
2	Mn 257.610†	466365.5	470946.8	498.73	ug/L	498.73	ppb	16:15:40
2	Mo 202.031†	7274.6	7334.4	493.02	ug/L	493.02	ppb	16:16:05
2	Ni 231.604†	20435.5	20555.7	495.65	ug/L	495.65	ppb	16:15:45

2	P 214.914†	4427.6	4240.8	2343.7 ug/L	2343.7 ppb	16:16:05
2	Pb 220.353†	4120.9	4219.2	497.58 ug/L	497.58 ppb	16:16:05
2	S 181.975 Axial†	765.6	732.3	980.77 ug/L	980.77 ppb	16:16:05
2	Sb 206.836†	1525.7	1503.5	513.01 ug/L	513.01 ppb	16:16:05
2	Se 196.026†	756.0	797.0	508.77 ug/L	508.77 ppb	16:16:05
2	Si 251.611†	81965.4	82353.5	2485.3 ug/L	2485.3 ppb	16:15:45
2	Sn 189.927†	2916.5	2940.5	493.05 ug/L	493.05 ppb	16:16:05
2	Ti 334.940†	316607.5	321415.7	486.22 ug/L	486.22 ppb	16:15:45
2	Tl 190.801†	1660.4	1717.1	499.57 ug/L	499.57 ppb	16:16:05
2	U 409.014†	15584.8	17398.0	490.99 ug/L	490.99 ppb	16:15:45
2	V 292.402†	73186.4	75454.3	502.63 ug/L	502.63 ppb	16:15:45
2	Zn 213.857†	55260.5	55149.6	492.55 ug/L	492.55 ppb	16:15:45
2	SiO2†	81608.3	81964.7	5333.8 ug/L	5333.8 ppb	16:16:47
3	Sc Radial	5192.9	5192.9	97.5 %		16:14:42
3	Y RADIAL	5515.8	5515.8	97.71 %		16:14:42
3	Al 396.153Radial†	6152.9	6307.3	5023.4 ug/L	5023.4 ppb	16:14:42
3	Ca 317.933Radial†	3014.1	3071.4	5077.7 ug/L	5077.7 ppb	16:15:02
3	Fe 238.204 Radial†	583.5	585.8	5072.8 ug/L	5072.8 ppb	16:15:02
3	K 766.490 Radial†	26562.8	24573.8	5191.3 ug/L	5191.3 ppb	16:14:42
3	Mg 279.077 IEC†	157.4	158.8	5230.9 ug/L	5230.9 ppb	16:15:02
3	Na 589.592 Radial†	34634.1	36627.9	9841.4 ug/L	9841.4 ppb	16:14:42
3	Sr 421.552†	76309.9	78270.3	500.89 ug/L	500.89 ppb	16:14:42
3	Sc 361.383	943115.9	943115.9	99.891 %		16:16:11
3	Y 371.029	786420.2	786420.2	98.627 %		16:16:11
3	Ag 328.068†	110828.0	110538.3	489.11 ug/L	489.11 ppb	16:16:16
3	As 188.979†	1251.6	1272.6	521.75 ug/L	521.75 ppb	16:16:36
3	B 249.677†	22964.0	23516.6	508.01 ug/L	508.01 ppb	16:16:16
3	Ba 233.527†	66863.0	66916.6	490.45 ug/L	490.45 ppb	16:16:16
3	Be 313.107†	1400595.6	1406661.4	498.86 ug/L	498.86 ppb	16:16:11
3	Cd 226.502†	45425.1	45691.8	487.68 ug/L	487.68 ppb	16:16:16
3	Co 228.616†	24990.6	25091.4	489.70 ug/L	489.70 ppb	16:16:16
3	Cr 267.716†	44753.5	44722.4	489.92 ug/L	489.92 ppb	16:16:16
3	Cu 324.752†	172115.6	166137.8	484.19 ug/L	484.19 ppb	16:16:16
3	Mn 257.610†	472402.4	472464.6	500.34 ug/L	500.34 ppb	16:16:11
3	Mo 202.031†	7321.0	7310.2	491.39 ug/L	491.39 ppb	16:16:36
3	Ni 231.604†	20316.2	20238.0	487.99 ug/L	487.99 ppb	16:16:16
3	P 214.914†	4468.4	4238.8	2344.2 ug/L	2344.2 ppb	16:16:36
3	Pb 220.353†	4150.3	4208.6	496.34 ug/L	496.34 ppb	16:16:36
3	S 181.975 Axial†	785.6	745.0	997.71 ug/L	997.71 ppb	16:16:36
3	Sb 206.836†	1554.8	1517.8	517.70 ug/L	517.70 ppb	16:16:36
3	Se 196.026†	768.3	802.0	511.85 ug/L	511.85 ppb	16:16:36
3	Si 251.611†	81587.8	81180.1	2449.8 ug/L	2449.8 ppb	16:16:16
3	Sn 189.927†	2950.8	2946.5	494.07 ug/L	494.07 ppb	16:16:36
3	Ti 334.940†	314978.5	316712.5	479.12 ug/L	479.12 ppb	16:16:16
3	Tl 190.801†	1659.2	1699.8	494.55 ug/L	494.55 ppb	16:16:36
3	U 409.014†	15586.1	17248.1	486.76 ug/L	486.76 ppb	16:16:16
3	V 292.402†	72491.6	74048.6	493.37 ug/L	493.37 ppb	16:16:16
3	Zn 213.857†	54968.2	54320.8	485.14 ug/L	485.14 ppb	16:16:16
3	SiO2†	81461.3	81025.6	5272.6 ug/L	5272.6 ppb	16:16:52

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	937209.1	99.265	%	0.5422				0.55%
Sc Radial	5252.9	98.6	%	1.79				1.81%
Y 371.029	782180.9	98.095	%	0.4654				0.47%
Y RADIAL	5535.0	98.05	%	1.188				1.21%
Ag 328.068†	111713.0	494.28	ug/L	4.476	494.28	ppb	4.476	0.91%
QC value within limits for Ag 328.068 Recovery = 98.86%								
Al 396.153Radial†	6274.7	4997.3	ug/L	36.80	4997.3	ppb	36.80	0.74%
QC value within limits for Al 396.153Radial Recovery = 99.95%								
As 188.979†	1270.5	520.92	ug/L	1.383	520.92	ppb	1.383	0.27%
QC value within limits for As 188.979 Recovery = 104.18%								
B 249.677†	23732.9	512.70	ug/L	4.200	512.70	ppb	4.200	0.82%
QC value within limits for B 249.677 Recovery = 102.54%								
Ba 233.527†	67460.5	494.44	ug/L	3.554	494.44	ppb	3.554	0.72%
QC value within limits for Ba 233.527 Recovery = 98.89%								
Be 313.107†	1405932.1	498.61	ug/L	0.412	498.61	ppb	0.412	0.08%
QC value within limits for Be 313.107 Recovery = 99.72%								
Ca 317.933Radial†	3022.9	4997.4	ug/L	103.16	4997.4	ppb	103.16	2.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.95%
Cd 226.502†            46073.1      491.76 ug/L         3.776      491.76 ppb          3.776   0.77%
   QC value within limits for Cd 226.502  Recovery = 98.35%
Co 228.616†            25237.0      492.53 ug/L         2.577      492.53 ppb          2.577   0.52%
   QC value within limits for Co 228.616  Recovery = 98.51%
Cr 267.716†            45112.8      494.20 ug/L         4.102      494.20 ppb          4.102   0.83%
   QC value within limits for Cr 267.716  Recovery = 98.84%
Cu 324.752†           168069.3      489.82 ug/L         4.874      489.82 ppb          4.874   1.00%
   QC value within limits for Cu 324.752  Recovery = 97.96%
Fe 238.204 Radial†       579.2      5016.3 ug/L        91.83      5016.3 ppb         91.83   1.83%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.33%
K 766.490 Radial†      24388.9      5152.2 ug/L        57.50      5152.2 ppb         57.50   1.12%
   QC value within limits for K 766.490 Radial  Recovery = 103.04%
Mg 279.077 IEC†          157.3      5181.1 ug/L        85.07      5181.1 ppb         85.07   1.64%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.62%
Mn 257.610†           471587.8      499.41 ug/L         0.834      499.41 ppb          0.834   0.17%
   QC value within limits for Mn 257.610  Recovery = 99.88%
Mo 202.031†             7310.8      491.43 ug/L         1.572      491.43 ppb          1.572   0.32%
   QC value within limits for Mo 202.031  Recovery = 98.29%
Na 589.592 Radial†     36342.8      9764.8 ug/L        72.22      9764.8 ppb         72.22   0.74%
   QC value within limits for Na 589.592 Radial  Recovery = 97.65%
Ni 231.604†            20415.7      492.28 ug/L         3.911      492.28 ppb          3.911   0.79%
   QC value within limits for Ni 231.604  Recovery = 98.46%
P 214.914†              4230.3      2338.2 ug/L         9.97      2338.2 ppb          9.97   0.43%
   QC value within limits for P 214.914  Recovery = 93.53%
Pb 220.353†             4205.6      495.98 ug/L         1.807      495.98 ppb          1.807   0.36%
   QC value within limits for Pb 220.353  Recovery = 99.20%
S 181.975 Axial†         733.0      981.66 ug/L        15.622      981.66 ppb         15.622   1.59%
   QC value within limits for S 181.975 Axial  Recovery = 98.17%
Sb 206.836†             1501.4      512.29 ug/L         5.817      512.29 ppb          5.817   1.14%
   QC value within limits for Sb 206.836  Recovery = 102.46%
Se 196.026†              799.2      509.90 ug/L         1.698      509.90 ppb          1.698   0.33%
   QC value within limits for Se 196.026  Recovery = 101.98%
Si 251.611†            81915.2      2472.1 ug/L        19.37      2472.1 ppb         19.37   0.78%
   QC value within limits for Si 251.611  Recovery = 98.88%
Sn 189.927†             2932.2      491.66 ug/L         3.334      491.66 ppb          3.334   0.68%
   QC value within limits for Sn 189.927  Recovery = 98.33%
Sr 421.552†            77753.3      497.58 ug/L         4.043      497.58 ppb          4.043   0.81%
   QC value within limits for Sr 421.552  Recovery = 99.52%
Ti 334.940†           319700.0      483.63 ug/L         3.922      483.63 ppb          3.922   0.81%
   QC value within limits for Ti 334.940  Recovery = 96.73%
Tl 190.801†             1707.0      496.66 ug/L         2.609      496.66 ppb          2.609   0.53%
   QC value within limits for Tl 190.801  Recovery = 99.33%
U 409.014†             17311.4      488.55 ug/L         2.189      488.55 ppb          2.189   0.45%
   QC value within limits for U 409.014  Recovery = 97.71%
V 292.402†             74875.8      498.81 ug/L         4.840      498.81 ppb          4.840   0.97%
   QC value within limits for V 292.402  Recovery = 99.76%
Zn 213.857†            54849.8      489.88 ug/L         4.113      489.88 ppb          4.113   0.84%
   QC value within limits for Zn 213.857  Recovery = 97.98%
SiO2†                  81690.4      5316.0 ug/L        37.75      5316.0 ppb         37.75   0.71%
   QC value within limits for SiO2  Recovery = 99.41%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/18/2010 16:19:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5507.1	5507.1	103	%			16:20:54
1	Y RADIAL	5809.0	5809.0	102.9	%			16:20:54
1	Al 396.153Radial†	8.1	3.2	2.5454	ug/L	2.5454	ppb	16:20:54
1	Ca 317.933Radial†	23.7	2.3	3.7889	ug/L	3.7889	ppb	16:21:14
1	Fe 238.204 Radial†	12.8	-0.5	-4.2301	ug/L	-4.2301	ppb	16:21:14
1	K 766.490 Radial†	3073.0	297.1	62.833	ug/L	62.833	ppb	16:20:54
1	Mg 279.077 IEC†	4.3	1.5	50.982	ug/L	50.982	ppb	16:21:14
1	Na 589.592 Radial†	-1031.3	101.1	27.154	ug/L	27.154	ppb	16:20:54
1	Sr 421.552†	52.5	39.1	0.2501	ug/L	0.2501	ppb	16:20:54
1	Sc 361.383	912082.7	912082.7	96.604	%			16:22:11
1	Y 371.029	775579.3	775579.3	97.267	%			16:22:11
1	Ag 328.068†	369.6	-28.6	-0.1253	ug/L	-0.1253	ppb	16:22:11
1	As 188.979†	12.9	32.9	13.385	ug/L	13.385	ppb	16:22:31
1	B 249.677†	248.2	784.4	17.020	ug/L	17.020	ppb	16:22:11
1	Ba 233.527†	15.8	-3.4	-0.0243	ug/L	-0.0243	ppb	16:22:31
1	Be 313.107†	-4359.5	18.0	0.0062	ug/L	0.0062	ppb	16:22:11
1	Cd 226.502†	-194.5	15.5	0.1654	ug/L	0.1654	ppb	16:22:31
1	Co 228.616†	-73.9	-3.1	-0.0603	ug/L	-0.0603	ppb	16:22:31
1	Cr 267.716†	100.4	23.9	0.2623	ug/L	0.2623	ppb	16:22:31
1	Cu 324.752†	6119.5	168.2	0.4906	ug/L	0.4906	ppb	16:22:11
1	Mn 257.610†	510.7	73.0	0.0748	ug/L	0.0748	ppb	16:22:31
1	Mo 202.031†	24.3	6.4	0.4287	ug/L	0.4287	ppb	16:22:31
1	Ni 231.604†	98.7	1.7	0.0404	ug/L	0.0404	ppb	16:22:31
1	P 214.914†	221.9	-4.9	-2.9048	ug/L	-2.9048	ppb	16:22:31
1	Pb 220.353†	-36.8	15.6	1.8407	ug/L	1.8407	ppb	16:22:31
1	S 181.975 Axial†	40.9	0.9	1.1436	ug/L	1.1436	ppb	16:22:31
1	Sb 206.836†	58.7	22.1	7.2821	ug/L	7.2821	ppb	16:22:31
1	Se 196.026†	-30.0	1.8	1.0949	ug/L	1.0949	ppb	16:22:31
1	Si 251.611†	621.1	145.8	4.4061	ug/L	4.4061	ppb	16:22:31
1	Sn 189.927†	7.3	0.1	0.0120	ug/L	0.0120	ppb	16:22:31
1	Ti 334.940†	-1385.1	-45.0	-0.0713	ug/L	-0.0713	ppb	16:22:11
1	Tl 190.801†	-33.9	3.7	1.0552	ug/L	1.0552	ppb	16:22:31
1	U 409.014†	-1628.6	-40.9	-1.1581	ug/L	-1.1581	ppb	16:22:11
1	V 292.402†	-1389.9	38.8	0.2606	ug/L	0.2606	ppb	16:22:11
1	Zn 213.857†	841.7	163.6	1.4732	ug/L	1.4732	ppb	16:22:31
1	SiO2†	637.2	134.6	8.7725	ug/L	8.7725	ppb	16:23:27
2	Sc Radial	5418.2	5418.2	102	%			16:21:19
2	Y RADIAL	5734.6	5734.6	101.6	%			16:21:19
2	Al 396.153Radial†	-19.9	-24.2	-19.432	ug/L	-19.432	ppb	16:21:19
2	Ca 317.933Radial†	18.9	-2.0	-3.3361	ug/L	-3.3361	ppb	16:21:40
2	Fe 238.204 Radial†	10.6	-2.4	-20.582	ug/L	-20.582	ppb	16:21:40
2	K 766.490 Radial†	3132.1	404.0	85.437	ug/L	85.437	ppb	16:21:19
2	Mg 279.077 IEC†	0.9	-1.8	-59.558	ug/L	-59.558	ppb	16:21:40
2	Na 589.592 Radial†	-1034.1	82.0	22.019	ug/L	22.019	ppb	16:21:19
2	Sr 421.552†	30.5	18.3	0.1171	ug/L	0.1171	ppb	16:21:19
2	Sc 361.383	910086.4	910086.4	96.392	%			16:22:37
2	Y 371.029	774851.2	774851.2	97.176	%			16:22:37
2	Ag 328.068†	436.4	41.6	0.1786	ug/L	0.1786	ppb	16:22:37
2	As 188.979†	-0.4	19.1	7.7806	ug/L	7.7806	ppb	16:22:57
2	B 249.677†	209.2	744.6	16.157	ug/L	16.157	ppb	16:22:37
2	Ba 233.527†	16.2	-2.9	-0.0233	ug/L	-0.0233	ppb	16:22:57
2	Be 313.107†	-4353.7	14.1	0.0052	ug/L	0.0052	ppb	16:22:37
2	Cd 226.502†	-191.9	17.8	0.1913	ug/L	0.1913	ppb	16:22:57
2	Co 228.616†	-64.2	6.8	0.1346	ug/L	0.1346	ppb	16:22:57
2	Cr 267.716†	98.5	22.2	0.2436	ug/L	0.2436	ppb	16:22:57
2	Cu 324.752†	6068.6	129.3	0.3788	ug/L	0.3788	ppb	16:22:37
2	Mn 257.610†	487.4	50.1	0.0534	ug/L	0.0534	ppb	16:22:57
2	Mo 202.031†	34.4	16.9	1.1357	ug/L	1.1357	ppb	16:22:57
2	Ni 231.604†	94.1	-2.9	-0.0695	ug/L	-0.0695	ppb	16:22:57

2	P 214.914†	216.4	-10.1	-5.8498 ug/L	-5.8498 ppb	16:22:57
2	Pb 220.353†	-30.6	22.0	2.5895 ug/L	2.5895 ppb	16:22:57
2	S 181.975 Axial†	43.9	4.1	5.4676 ug/L	5.4676 ppb	16:22:57
2	Sb 206.836†	40.1	2.9	1.0125 ug/L	1.0125 ppb	16:22:57
2	Se 196.026†	-24.9	7.1	4.2901 ug/L	4.2901 ppb	16:22:57
2	Si 251.611†	645.0	172.0	5.1907 ug/L	5.1907 ppb	16:22:57
2	Sn 189.927†	20.3	13.6	2.2769 ug/L	2.2769 ppb	16:22:57
2	Ti 334.940†	-1280.1	60.7	0.0988 ug/L	0.0988 ppb	16:22:37
2	Tl 190.801†	-42.6	-5.5	-1.5740 ug/L	-1.5740 ppb	16:22:57
2	U 409.014†	-1781.6	-203.4	-5.7577 ug/L	-5.7577 ppb	16:22:37
2	V 292.402†	-1505.9	-84.8	-0.5505 ug/L	-0.5505 ppb	16:22:37
2	Zn 213.857†	822.1	145.2	1.3103 ug/L	1.3103 ppb	16:22:57
2	SiO2†	603.3	100.9	6.5514 ug/L	6.5514 ppb	16:23:32
3	Sc Radial	5318.7	5318.7	99.8 %		16:21:45
3	Y RADIAL	5653.8	5653.8	100.2 %		16:21:45
3	Al 396.153Radial†	36.0	31.4	25.088 ug/L	25.088 ppb	16:21:45
3	Ca 317.933Radial†	24.1	3.5	5.8151 ug/L	5.8151 ppb	16:22:05
3	Fe 238.204 Radial†	11.9	-0.9	-7.5326 ug/L	-7.5326 ppb	16:22:05
3	K 766.490 Radial†	3108.8	438.2	92.680 ug/L	92.680 ppb	16:21:45
3	Mg 279.077 IEC†	1.4	-1.3	-41.668 ug/L	-41.668 ppb	16:22:05
3	Na 589.592 Radial†	-1002.9	94.2	25.322 ug/L	25.322 ppb	16:21:45
3	Sr 421.552†	26.8	15.2	0.0971 ug/L	0.0971 ppb	16:21:45
3	Sc 361.383	916804.3	916804.3	97.104 %		16:23:02
3	Y 371.029	779823.1	779823.1	97.799 %		16:23:02
3	Ag 328.068†	392.0	-7.5	-0.0276 ug/L	-0.0276 ppb	16:23:02
3	As 188.979†	5.8	25.5	10.377 ug/L	10.377 ppb	16:23:22
3	B 249.677†	139.3	671.0	14.560 ug/L	14.560 ppb	16:23:02
3	Ba 233.527†	11.8	-7.5	-0.0540 ug/L	-0.0540 ppb	16:23:22
3	Be 313.107†	-4426.6	-27.9	-0.0098 ug/L	-0.0098 ppb	16:23:02
3	Cd 226.502†	-194.1	17.0	0.1808 ug/L	0.1808 ppb	16:23:22
3	Co 228.616†	-80.0	-9.0	-0.1739 ug/L	-0.1739 ppb	16:23:22
3	Cr 267.716†	89.7	12.3	0.1378 ug/L	0.1378 ppb	16:23:22
3	Cu 324.752†	6138.9	155.6	0.4570 ug/L	0.4570 ppb	16:23:02
3	Mn 257.610†	492.2	51.3	0.0552 ug/L	0.0552 ppb	16:23:22
3	Mo 202.031†	26.5	8.5	0.5686 ug/L	0.5686 ppb	16:23:22
3	Ni 231.604†	113.5	16.3	0.3940 ug/L	0.3940 ppb	16:23:22
3	P 214.914†	218.4	-9.7	-5.6133 ug/L	-5.6133 ppb	16:23:22
3	Pb 220.353†	-42.8	9.6	1.1401 ug/L	1.1401 ppb	16:23:22
3	S 181.975 Axial†	39.6	-0.8	-1.0493 ug/L	-1.0493 ppb	16:23:22
3	Sb 206.836†	57.0	20.0	6.6132 ug/L	6.6132 ppb	16:23:22
3	Se 196.026†	-30.1	1.9	1.1466 ug/L	1.1466 ppb	16:23:22
3	Si 251.611†	613.7	134.9	4.0736 ug/L	4.0736 ppb	16:23:22
3	Sn 189.927†	17.3	10.3	1.7306 ug/L	1.7306 ppb	16:23:22
3	Ti 334.940†	-1317.6	31.9	0.0556 ug/L	0.0556 ppb	16:23:02
3	Tl 190.801†	-39.3	-1.8	-0.5129 ug/L	-0.5129 ppb	16:23:22
3	U 409.014†	-1846.1	-256.2	-7.2558 ug/L	-7.2558 ppb	16:23:02
3	V 292.402†	-1364.0	72.9	0.4735 ug/L	0.4735 ppb	16:23:02
3	Zn 213.857†	813.1	129.6	1.1656 ug/L	1.1656 ppb	16:23:22
3	SiO2†	619.8	113.3	7.3738 ug/L	7.3738 ppb	16:23:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	912991.2	96.700	%	0.3654				0.38%
Sc Radial	5414.7	102	%	1.8				1.74%
Y 371.029	776751.2	97.414	%	0.3367				0.35%
Y RADIAL	5732.5	101.6	%	1.38				1.35%
Ag 328.068†	1.8	0.0086	ug/L	0.15512	0.0086	ppb	0.15512	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.5	2.7339	ug/L	22.26068	2.7339	ppb	22.26068	814.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	25.9	10.514	ug/L	2.8048	10.514	ppb	2.8048	26.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	733.3	15.912	ug/L	1.2482	15.912	ppb	1.2482	7.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.6	-0.0339	ug/L	0.01747	-0.0339	ppb	0.01747	51.55%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	1.4	0.0005	ug/L	0.00895	0.0005	ppb	0.00895	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.3	2.0893	ug/L	4.80654	2.0893	ppb	4.80654	230.06%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                16.8      0.1792 ug/L       0.01299      0.1792 ppb        0.01299   7.25%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -1.8     -0.0332 ug/L       0.15605     -0.0332 ppb        0.15605 470.14%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                19.4      0.2145 ug/L       0.06713      0.2145 ppb        0.06713  31.29%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               151.0      0.4421 ug/L       0.05737      0.4421 ppb        0.05737  12.97%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.2     -10.782 ug/L        8.6465     -10.782 ppb         8.6465  80.20%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         379.8      80.317 ug/L       15.5687      80.317 ppb        15.5687  19.38%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.5     -16.748 ug/L       59.3338     -16.748 ppb        59.3338 354.27%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                58.1      0.0612 ug/L       0.01186      0.0612 ppb        0.01186  19.39%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                10.6      0.7110 ug/L       0.37442      0.7110 ppb        0.37442  52.66%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         92.4      24.832 ug/L        2.6024      24.832 ppb         2.6024  10.48%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.0      0.1216 ug/L       0.24220      0.1216 ppb        0.24220 199.16%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -8.2     -4.7893 ug/L       1.63633     -4.7893 ppb        1.63633  34.17%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                15.8      1.8568 ug/L       0.72482      1.8568 ppb        0.72482  39.04%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            1.4      1.8540 ug/L       3.31601      1.8540 ppb        3.31601 178.86%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                15.0      4.9693 ug/L       3.44298      4.9693 ppb        3.44298  69.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.6      2.1772 ug/L       1.83001      2.1772 ppb        1.83001  84.05%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               150.9      4.5568 ug/L       0.57364      4.5568 ppb        0.57364  12.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 8.0      1.3398 ug/L       1.18191      1.3398 ppb        1.18191  88.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                24.2      0.1548 ug/L       0.08317      0.1548 ppb        0.08317  53.72%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                15.9      0.0277 ug/L       0.08839      0.0277 ppb        0.08839 319.33%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -1.2     -0.3439 ug/L       1.32275     -0.3439 ppb        1.32275 384.64%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -166.8     -4.7239 ug/L       3.17756     -4.7239 ppb        3.17756  67.27%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  9.0      0.0612 ug/L       0.54038      0.0612 ppb        0.54038 883.05%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               146.1      1.3164 ug/L       0.15384      1.3164 ppb        0.15384  11.69%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     116.3      7.5659 ug/L       1.12295      7.5659 ppb        1.12295  14.84%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 1/18/2010 16:35:07 **Plasma On Time: 1/18/2010 05:48:39**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\011810.sif
Batch ID:
Results Data Set: 011810
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 1/18/2010 14:51:13**
IEC File: 011110.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 37**
Sample ID: LR1 **Date Collected: 1/18/2010 16:35:08**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc Radial	5122.9	5122.9	96.2	%			16:37:02
1	Y RADIAL	5439.5	5439.5	96.36	%			16:37:02
1	Al 396.153Radial†	-34.6	-40.6	-31.292	ug/L	-31.292	ppb	16:37:02

1	Ca 317.933Radial†	17.0	-2.9	-4.7917 ug/L	-4.7917 ppb	16:37:22
1	Fe 238.204 Radial†	42186.9	43856.2	378690 ug/L	378690 ppb	16:37:02
1	K 766.490 Radial†	2646.4	76.4	16.213 ug/L	16.213 ppb	16:37:02
1	Mg 279.077 IEC†	13.5	11.4	-21.336 ug/L	-21.336 ppb	16:37:22
1	Na 589.592 Radial†	-1050.9	5.9	1.5722 ug/L	1.5722 ppb	16:37:02
1	Sr 421.552†	46.1	36.2	0.2319 ug/L	0.2319 ppb	16:37:02
1	Sc 361.383	907304.0	907304.0	96.097 %		16:38:19
1	Y 371.029	763029.0	763029.0	95.693 %		16:38:19
1	Ag 328.068†	-26340.2	-27821.1	0.4998 ug/L	0.4998 ppb	16:38:19
1	As 188.979†	-215.0	-204.2	5.7236 ug/L	5.7236 ppb	16:38:39
1	B 249.677†	1884.8	2488.9	-7.5131 ug/L	-7.5131 ppb	16:38:19
1	Ba 233.527†	-1916.0	-2013.5	-3.0795 ug/L	-3.0795 ppb	16:38:19
1	Be 313.107†	-4256.2	101.8	0.0359 ug/L	0.0359 ppb	16:38:19
1	Cd 226.502†	3196.3	3542.9	-1.2793 ug/L	-1.2793 ppb	16:38:19
1	Co 228.616†	195.9	277.2	-0.1222 ug/L	-0.1222 ppb	16:38:39
1	Cr 267.716†	-536.6	-638.4	0.4285 ug/L	0.4285 ppb	16:38:19
1	Cu 324.752†	-1802.1	-8041.8	-3.4250 ug/L	-3.4250 ppb	16:38:19
1	Mn 257.610†	-38583.6	-40606.1	-5.5903 ug/L	-5.5903 ppb	16:38:19
1	Mo 202.031†	-342.1	-374.8	4.2262 ug/L	4.2262 ppb	16:38:19
1	Ni 231.604†	230.8	139.6	3.3660 ug/L	3.3660 ppb	16:38:39
1	P 214.914†	749.3	545.2	13.205 ug/L	13.205 ppb	16:38:39
1	Pb 220.353†	212.3	274.7	-3.9479 ug/L	-3.9479 ppb	16:38:39
1	S 181.975 Axial†	67.5	28.8	38.548 ug/L	38.548 ppb	16:38:39
1	Sb 206.836†	25.2	-12.4	4.9802 ug/L	4.9802 ppb	16:38:39
1	Se 196.026†	-2070.2	-2121.3	32.306 ug/L	32.306 ppb	16:38:39
1	Si 251.611†	-707.4	-1233.3	-36.999 ug/L	-36.999 ppb	16:38:19
1	Sn 189.927†	-24.7	-33.2	0.8094 ug/L	0.8094 ppb	16:38:39
1	Ti 334.940†	-1379.0	-46.2	-0.1240 ug/L	-0.1240 ppb	16:38:19
1	Tl 190.801†	-44.9	-7.9	-2.6270 ug/L	-2.6270 ppb	16:38:39
1	U 409.014†	381.4	2041.8	14.664 ug/L	14.664 ppb	16:38:19
1	V 292.402†	6530.6	8273.4	-0.9969 ug/L	-0.9969 ppb	16:38:19
1	Zn 213.857†	4603.6	4082.9	0.0596 ug/L	0.0596 ppb	16:38:39
1	SiO2†	-729.4	-1284.0	-83.080 ug/L	-83.080 ppb	16:39:37
2	Sc Radial	5164.1	5164.1	96.9 %		16:37:27
2	Y RADIAL	5465.9	5465.9	96.83 %		16:37:27
2	Al 396.153Radial†	-13.7	-18.8	-13.814 ug/L	-13.814 ppb	16:37:27
2	Ca 317.933Radial†	14.2	-5.9	-9.7790 ug/L	-9.7790 ppb	16:37:47
2	Fe 238.204 Radial†	42604.2	43936.7	379390 ug/L	379390 ppb	16:37:27
2	K 766.490 Radial†	2652.0	60.2	12.791 ug/L	12.791 ppb	16:37:27
2	Mg 279.077 IEC†	13.2	10.9	-37.061 ug/L	-37.061 ppb	16:37:47
2	Na 589.592 Radial†	-1041.6	24.2	6.4889 ug/L	6.4889 ppb	16:37:27
2	Sr 421.552†	120.5	112.6	0.7210 ug/L	0.7210 ppb	16:37:27
2	Sc 361.383	911687.3	911687.3	96.562 %		16:38:45
2	Y 371.029	766314.8	766314.8	96.105 %		16:38:45
2	Ag 328.068†	-26507.8	-27862.8	0.5413 ug/L	0.5413 ppb	16:38:45
2	As 188.979†	-214.4	-202.5	6.5678 ug/L	6.5678 ppb	16:39:05
2	B 249.677†	1754.5	2344.4	-10.760 ug/L	-10.760 ppb	16:38:45
2	Ba 233.527†	-2029.0	-2121.0	-3.8426 ug/L	-3.8426 ppb	16:38:45
2	Be 313.107†	-4303.5	74.0	0.0259 ug/L	0.0259 ppb	16:38:45
2	Cd 226.502†	3239.2	3571.4	-1.0469 ug/L	-1.0469 ppb	16:38:45
2	Co 228.616†	186.0	266.1	-0.3505 ug/L	-0.3505 ppb	16:39:05
2	Cr 267.716†	-652.4	-755.7	-0.8417 ug/L	-0.8417 ppb	16:38:45
2	Cu 324.752†	-1816.1	-8047.2	-3.4056 ug/L	-3.4056 ppb	16:38:45
2	Mn 257.610†	-38931.5	-40773.4	-5.6980 ug/L	-5.6980 ppb	16:38:45
2	Mo 202.031†	-345.6	-376.7	4.1521 ug/L	4.1521 ppb	16:38:45
2	Ni 231.604†	219.6	126.9	3.0592 ug/L	3.0592 ppb	16:39:05
2	P 214.914†	730.2	521.6	-0.9016 ug/L	-0.9016 ppb	16:39:05
2	Pb 220.353†	200.0	260.9	-5.6332 ug/L	-5.6332 ppb	16:39:05
2	S 181.975 Axial†	56.6	17.1	22.970 ug/L	22.970 ppb	16:39:05
2	Sb 206.836†	26.8	-10.9	5.4854 ug/L	5.4854 ppb	16:39:05
2	Se 196.026†	-2048.1	-2088.1	55.144 ug/L	55.144 ppb	16:39:05
2	Si 251.611†	-681.9	-1203.4	-36.093 ug/L	-36.093 ppb	16:38:45
2	Sn 189.927†	-30.8	-39.4	-0.2157 ug/L	-0.2157 ppb	16:39:05
2	Ti 334.940†	-1418.1	-79.8	-0.1752 ug/L	-0.1752 ppb	16:38:45
2	Tl 190.801†	-44.7	-7.6	-2.5245 ug/L	-2.5245 ppb	16:39:05
2	U 409.014†	484.3	2146.4	17.550 ug/L	17.550 ppb	16:38:45
2	V 292.402†	6635.2	8349.0	-0.5969 ug/L	-0.5969 ppb	16:38:45
2	Zn 213.857†	4626.5	4083.6	0.0003 ug/L	0.0003 ppb	16:39:05
2	SiO2†	-724.1	-1274.9	-82.483 ug/L	-82.483 ppb	16:39:42
3	Sc Radial	5197.0	5197.0	97.6 %		16:37:52
3	Y RADIAL	5501.9	5501.9	97.47 %		16:37:52

3	Al 396.153Radial†	-28.5	-33.9	-25.910 ug/L	-25.910 ppb	16:37:52
3	Ca 317.933Radial†	12.5	-7.7	-12.778 ug/L	-12.778 ppb	16:38:12
3	Fe 238.204 Radial†	42777.5	43835.8	378520 ug/L	378520 ppb	16:37:52
3	K 766.490 Radial†	2663.6	54.8	11.650 ug/L	11.650 ppb	16:37:52
3	Mg 279.077 IEC†	11.7	9.3	-88.740 ug/L	-88.740 ppb	16:38:12
3	Na 589.592 Radial†	-1072.6	-0.8	-0.2159 ug/L	-0.2159 ppb	16:37:52
3	Sr 421.552†	63.5	53.4	0.3419 ug/L	0.3419 ppb	16:37:52
3	Sc 361.383	907797.9	907797.9	96.150 %		16:39:11
3	Y 371.029	763262.0	763262.0	95.722 %		16:39:11
3	Ag 328.068†	-26489.9	-27961.8	-0.1699 ug/L	-0.1699 ppb	16:39:11
3	As 188.979†	-215.8	-204.9	5.4020 ug/L	5.4020 ppb	16:39:31
3	B 249.677†	1873.7	2476.2	-7.7592 ug/L	-7.7592 ppb	16:39:11
3	Ba 233.527†	-1985.8	-2085.1	-3.6058 ug/L	-3.6058 ppb	16:39:11
3	Be 313.107†	-4287.1	72.0	0.0252 ug/L	0.0252 ppb	16:39:11
3	Cd 226.502†	3249.9	3596.9	-0.6855 ug/L	-0.6855 ppb	16:39:11
3	Co 228.616†	182.2	262.9	-0.3992 ug/L	-0.3992 ppb	16:39:31
3	Cr 267.716†	-620.0	-724.9	-0.5184 ug/L	-0.5184 ppb	16:39:11
3	Cu 324.752†	-1811.1	-8050.1	-3.4568 ug/L	-3.4568 ppb	16:39:11
3	Mn 257.610†	-38735.3	-40742.0	-5.7487 ug/L	-5.7487 ppb	16:39:11
3	Mo 202.031†	-338.5	-370.9	4.4769 ug/L	4.4769 ppb	16:39:11
3	Ni 231.604†	223.3	131.7	3.1754 ug/L	3.1754 ppb	16:39:31
3	P 214.914†	728.3	522.9	0.5389 ug/L	0.5389 ppb	16:39:31
3	Pb 220.353†	221.8	284.4	-2.7842 ug/L	-2.7842 ppb	16:39:31
3	S 181.975 Axial†	54.1	14.8	19.790 ug/L	19.790 ppb	16:39:31
3	Sb 206.836†	18.4	-19.6	2.6373 ug/L	2.6373 ppb	16:39:31
3	Se 196.026†	-2043.6	-2092.6	49.317 ug/L	49.317 ppb	16:39:31
3	Si 251.611†	-688.8	-1213.5	-36.406 ug/L	-36.406 ppb	16:39:11
3	Sn 189.927†	-26.3	-34.9	0.5306 ug/L	0.5306 ppb	16:39:31
3	Ti 334.940†	-1401.3	-68.6	-0.1520 ug/L	-0.1520 ppb	16:39:11
3	Tl 190.801†	-49.0	-12.2	-3.8532 ug/L	-3.8532 ppb	16:39:31
3	U 409.014†	290.0	1946.5	11.988 ug/L	11.988 ppb	16:39:11
3	V 292.402†	6657.7	8401.8	-0.1292 ug/L	-0.1292 ppb	16:39:11
3	Zn 213.857†	4613.6	4090.7	0.1479 ug/L	0.1479 ppb	16:39:31
3	SiO2†	-648.9	-1199.9	-77.598 ug/L	-77.598 ppb	16:39:47

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	908929.7	96.270	%	0.2543				0.26%
Sc Radial	5161.3	96.9	%	0.70				0.72%
Y 371.029	764201.9	95.840	%	0.2299				0.24%
Y RADIAL	5469.1	96.89	%	0.555				0.57%
Ag 328.068†	-27881.9	0.2904	ug/L	0.39919	0.2904	ppb	0.39919	137.47%
Al 396.153Radial†	-31.1	-23.672	ug/L	8.9515	-23.672	ppb	8.9515	37.81%
As 188.979†	-203.8	5.8978	ug/L	0.60213	5.8978	ppb	0.60213	10.21%
B 249.677†	2436.5	-8.6773	ug/L	1.80748	-8.6773	ppb	1.80748	20.83%
Ba 233.527†	-2073.2	-3.5093	ug/L	0.39060	-3.5093	ppb	0.39060	11.13%
Be 313.107†	82.6	0.0290	ug/L	0.00595	0.0290	ppb	0.00595	20.51%
Ca 317.933Radial†	-5.5	-9.1164	ug/L	4.03439	-9.1164	ppb	4.03439	44.25%
Cd 226.502†	3570.4	-1.0039	ug/L	0.29923	-1.0039	ppb	0.29923	29.81%
Co 228.616†	268.7	-0.2906	ug/L	0.14788	-0.2906	ppb	0.14788	50.89%
Cr 267.716†	-706.3	-0.3105	ug/L	0.66013	-0.3105	ppb	0.66013	212.61%
Cu 324.752†	-8046.4	-3.4291	ug/L	0.02586	-3.4291	ppb	0.02586	0.75%
Fe 238.204 Radial†	43876.3	378870	ug/L	460.7	378870	ppb	460.7	0.12%
K 766.490 Radial†	63.8	13.551	ug/L	2.3746	13.551	ppb	2.3746	17.52%
Mg 279.077 IEC†	10.5	-49.045	ug/L	35.2643	-49.045	ppb	35.2643	71.90%
Mn 257.610†	-40707.1	-5.6790	ug/L	0.08092	-5.6790	ppb	0.08092	1.42%
Mo 202.031†	-374.1	4.2851	ug/L	0.17024	4.2851	ppb	0.17024	3.97%
Na 589.592 Radial†	9.7	2.6151	ug/L	3.47194	2.6151	ppb	3.47194	132.77%
Ni 231.604†	132.8	3.2002	ug/L	0.15492	3.2002	ppb	0.15492	4.84%
P 214.914†	529.9	4.2807	ug/L	7.76192	4.2807	ppb	7.76192	181.33%
Pb 220.353†	273.3	-4.1218	ug/L	1.43240	-4.1218	ppb	1.43240	34.75%
S 181.975 Axial†	20.2	27.103	ug/L	10.0386	27.103	ppb	10.0386	37.04%
Sb 206.836†	-14.3	4.3677	ug/L	1.51965	4.3677	ppb	1.51965	34.79%
Se 196.026†	-2100.7	45.589	ug/L	11.8668	45.589	ppb	11.8668	26.03%
Si 251.611†	-1216.7	-36.499	ug/L	0.4601	-36.499	ppb	0.4601	1.26%
Sn 189.927†	-35.8	0.3748	ug/L	0.53006	0.3748	ppb	0.53006	141.44%
Sr 421.552†	67.4	0.4316	ug/L	0.25658	0.4316	ppb	0.25658	59.45%
Ti 334.940†	-64.9	-0.1504	ug/L	0.02561	-0.1504	ppb	0.02561	17.03%
Tl 190.801†	-9.2	-3.0016	ug/L	0.73932	-3.0016	ppb	0.73932	24.63%

U 409.014†	2044.9	14.734	ug/L	2.7819	14.734	ppb	2.7819 18.88%
V 292.402†	8341.4	-0.5743	ug/L	0.43429	-0.5743	ppb	0.43429 75.61%
Zn 213.857†	4085.7	0.0693	ug/L	0.07429	0.0693	ppb	0.07429 107.25%
SiO2†	-1252.9	-81.054	ug/L	3.0073	-81.054	ppb	3.0073 3.71%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/18/2010 16:41:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5300.0	5300.0	99.5	%			16:43:50
1	Y RADIAL	5602.3	5602.3	99.24	%			16:43:50
1	Al 396.153Radial†	6436.2	6464.5	5149.2	ug/L	5149.2	ppb	16:43:50
1	Ca 317.933Radial†	2999.9	2994.7	4950.8	ug/L	4950.8	ppb	16:44:10
1	Fe 238.204 Radial†	586.5	576.7	4994.2	ug/L	4994.2	ppb	16:44:10
1	K 766.490 Radial†	26453.6	23913.4	5051.6	ug/L	5051.6	ppb	16:43:50
1	Mg 279.077 IEC†	154.9	153.0	5041.3	ug/L	5041.3	ppb	16:44:10
1	Na 589.592 Radial†	35862.9	37144.9	9980.3	ug/L	9980.3	ppb	16:43:50
1	Sr 421.552†	79770.0	80166.1	513.03	ug/L	513.03	ppb	16:43:50
1	Sc 361.383	938545.0	938545.0	99.406	%			16:45:07
1	Y 371.029	782678.3	782678.3	98.157	%			16:45:07
1	Ag 328.068†	112347.0	112606.7	498.20	ug/L	498.20	ppb	16:45:13
1	As 188.979†	1175.6	1202.2	493.24	ug/L	493.24	ppb	16:45:33
1	B 249.677†	21952.5	22611.1	488.36	ug/L	488.36	ppb	16:45:13
1	Ba 233.527†	67417.2	67800.1	496.93	ug/L	496.93	ppb	16:45:13
1	Be 313.107†	1388015.1	1400834.4	496.84	ug/L	496.84	ppb	16:45:07
1	Cd 226.502†	45786.4	46276.7	493.94	ug/L	493.94	ppb	16:45:13
1	Co 228.616†	25164.8	25388.4	495.46	ug/L	495.46	ppb	16:45:13
1	Cr 267.716†	45259.8	45450.0	497.89	ug/L	497.89	ppb	16:45:13
1	Cu 324.752†	174572.5	169448.5	493.83	ug/L	493.83	ppb	16:45:13
1	Mn 257.610†	468182.7	470522.8	498.28	ug/L	498.28	ppb	16:45:07
1	Mo 202.031†	7256.7	7281.2	489.44	ug/L	489.44	ppb	16:45:33
1	Ni 231.604†	20598.3	20620.7	497.22	ug/L	497.22	ppb	16:45:13
1	P 214.914†	4422.4	4214.2	2328.2	ug/L	2328.2	ppb	16:45:33
1	Pb 220.353†	4074.4	4152.5	489.77	ug/L	489.77	ppb	16:45:33
1	S 181.975 Axial†	768.4	731.5	979.60	ug/L	979.60	ppb	16:45:33
1	Sb 206.836†	1482.3	1452.4	495.99	ug/L	495.99	ppb	16:45:33
1	Se 196.026†	758.5	795.9	507.82	ug/L	507.82	ppb	16:45:33
1	Si 251.611†	82288.3	82282.6	2483.2	ug/L	2483.2	ppb	16:45:13
1	Sn 189.927†	2899.6	2909.4	487.83	ug/L	487.83	ppb	16:45:33
1	Ti 334.940†	325292.2	328623.4	497.13	ug/L	497.13	ppb	16:45:07
1	Tl 190.801†	1655.0	1703.6	495.77	ug/L	495.77	ppb	16:45:33
1	U 409.014†	15807.2	17546.5	495.20	ug/L	495.20	ppb	16:45:13
1	V 292.402†	73319.1	75234.5	501.14	ug/L	501.14	ppb	16:45:13
1	Zn 213.857†	55374.6	54997.5	491.17	ug/L	491.17	ppb	16:45:13
1	SiO2†	82014.0	81978.8	5334.9	ug/L	5334.9	ppb	16:46:40
2	Sc Radial	5288.6	5288.6	99.3	%			16:44:15
2	Y RADIAL	5554.4	5554.4	98.40	%			16:44:15
2	Al 396.153Radial†	6325.9	6367.3	5071.1	ug/L	5071.1	ppb	16:44:15
2	Ca 317.933Radial†	3005.4	3006.7	4970.7	ug/L	4970.7	ppb	16:44:35
2	Fe 238.204 Radial†	586.4	577.9	5004.6	ug/L	5004.6	ppb	16:44:35
2	K 766.490 Radial†	26305.6	23821.8	5032.3	ug/L	5032.3	ppb	16:44:15
2	Mg 279.077 IEC†	158.7	157.2	5178.0	ug/L	5178.0	ppb	16:44:35
2	Na 589.592 Radial†	35104.0	36458.5	9795.9	ug/L	9795.9	ppb	16:44:15
2	Sr 421.552†	78157.0	78714.8	503.74	ug/L	503.74	ppb	16:44:15
2	Sc 361.383	929711.6	929711.6	98.471	%			16:45:38
2	Y 371.029	775433.3	775433.3	97.249	%			16:45:38
2	Ag 328.068†	111774.5	113099.1	500.39	ug/L	500.39	ppb	16:45:44
2	As 188.979†	1197.6	1235.8	506.91	ug/L	506.91	ppb	16:46:04
2	B 249.677†	21893.9	22761.4	491.60	ug/L	491.60	ppb	16:45:44
2	Ba 233.527†	67222.6	68246.8	500.20	ug/L	500.20	ppb	16:45:44
2	Be 313.107†	1375315.4	1401204.0	496.97	ug/L	496.97	ppb	16:45:38
2	Cd 226.502†	45757.7	46685.1	498.30	ug/L	498.30	ppb	16:45:44
2	Co 228.616†	25161.3	25625.4	500.10	ug/L	500.10	ppb	16:45:44
2	Cr 267.716†	45065.2	45685.0	500.46	ug/L	500.46	ppb	16:45:44
2	Cu 324.752†	173467.6	169995.0	495.43	ug/L	495.43	ppb	16:45:44
2	Mn 257.610†	464724.7	471486.0	499.30	ug/L	499.30	ppb	16:45:38
2	Mo 202.031†	7315.2	7410.0	498.09	ug/L	498.09	ppb	16:46:04
2	Ni 231.604†	20563.0	20781.8	501.11	ug/L	501.11	ppb	16:45:44

2	P 214.914†	4457.4	4292.0	2372.7 ug/L	2372.7 ppb	16:46:04
2	Pb 220.353†	4116.0	4233.7	499.32 ug/L	499.32 ppb	16:46:04
2	S 181.975 Axial†	762.4	732.7	981.29 ug/L	981.29 ppb	16:46:04
2	Sb 206.836†	1501.9	1486.5	507.59 ug/L	507.59 ppb	16:46:04
2	Se 196.026†	770.9	815.8	520.09 ug/L	520.09 ppb	16:46:04
2	Si 251.611†	81884.1	82658.6	2494.5 ug/L	2494.5 ppb	16:45:44
2	Sn 189.927†	2932.0	2970.1	497.99 ug/L	497.99 ppb	16:46:04
2	Ti 334.940†	322543.9	328941.6	497.60 ug/L	497.60 ppb	16:45:38
2	Tl 190.801†	1656.8	1721.2	500.84 ug/L	500.84 ppb	16:46:04
2	U 409.014†	15713.8	17602.7	496.79 ug/L	496.79 ppb	16:45:44
2	V 292.402†	73177.3	75791.2	504.92 ug/L	504.92 ppb	16:45:44
2	Zn 213.857†	55293.6	55444.6	495.17 ug/L	495.17 ppb	16:45:44
2	SiO2†	83143.6	83909.8	5460.6 ug/L	5460.6 ppb	16:46:45
3	Sc Radial	5186.9	5186.9	97.4 %		16:44:40
3	Y RADIAL	5485.0	5485.0	97.17 %		16:44:40
3	Al 396.153Radial†	6129.9	6290.9	5010.4 ug/L	5010.4 ppb	16:44:40
3	Ca 317.933Radial†	3026.6	3087.8	5104.9 ug/L	5104.9 ppb	16:45:00
3	Fe 238.204 Radial†	586.3	589.4	5104.0 ug/L	5104.0 ppb	16:45:00
3	K 766.490 Radial†	25815.0	23837.5	5035.6 ug/L	5035.6 ppb	16:44:40
3	Mg 279.077 IEC†	159.7	161.4	5316.0 ug/L	5316.0 ppb	16:45:00
3	Na 589.592 Radial†	34447.3	36477.4	9801.0 ug/L	9801.0 ppb	16:44:40
3	Sr 421.552†	76689.5	78751.4	503.97 ug/L	503.97 ppb	16:44:40
3	Sc 361.383	943486.6	943486.6	99.930 %		16:46:10
3	Y 371.029	785245.9	785245.9	98.480 %		16:46:10
3	Ag 328.068†	111961.3	111628.7	493.93 ug/L	493.93 ppb	16:46:15
3	As 188.979†	1176.2	1196.6	491.04 ug/L	491.04 ppb	16:46:35
3	B 249.677†	21970.7	22513.7	486.23 ug/L	486.23 ppb	16:46:15
3	Ba 233.527†	67374.3	67402.0	494.01 ug/L	494.01 ppb	16:46:15
3	Be 313.107†	1398013.9	1403526.9	497.80 ug/L	497.80 ppb	16:46:10
3	Cd 226.502†	45711.9	45960.9	490.55 ug/L	490.55 ppb	16:46:15
3	Co 228.616†	25192.2	25283.3	493.40 ug/L	493.40 ppb	16:46:15
3	Cr 267.716†	45024.7	44976.2	492.71 ug/L	492.71 ppb	16:46:15
3	Cu 324.752†	173824.8	167780.5	488.98 ug/L	488.98 ppb	16:46:15
3	Mn 257.610†	472641.7	472518.2	500.39 ug/L	500.39 ppb	16:46:10
3	Mo 202.031†	7276.7	7263.0	488.23 ug/L	488.23 ppb	16:46:35
3	Ni 231.604†	20490.6	20404.5	492.01 ug/L	492.01 ppb	16:46:15
3	P 214.914†	4425.1	4193.6	2317.2 ug/L	2317.2 ppb	16:46:35
3	Pb 220.353†	4105.5	4162.1	490.86 ug/L	490.86 ppb	16:46:35
3	S 181.975 Axial†	765.7	724.8	970.62 ug/L	970.62 ppb	16:46:35
3	Sb 206.836†	1491.7	1454.1	496.49 ug/L	496.49 ppb	16:46:35
3	Se 196.026†	760.7	794.1	507.09 ug/L	507.09 ppb	16:46:35
3	Si 251.611†	82035.9	81596.4	2462.4 ug/L	2462.4 ppb	16:46:15
3	Sn 189.927†	2909.9	2904.5	487.03 ug/L	487.03 ppb	16:46:35
3	Ti 334.940†	328299.1	329918.6	499.09 ug/L	499.09 ppb	16:46:10
3	Tl 190.801†	1639.0	1678.9	488.66 ug/L	488.66 ppb	16:46:35
3	U 409.014†	15720.9	17376.9	490.40 ug/L	490.40 ppb	16:46:15
3	V 292.402†	73275.1	74804.1	498.27 ug/L	498.27 ppb	16:46:15
3	Zn 213.857†	55270.2	54601.3	487.63 ug/L	487.63 ppb	16:46:15
3	SiO2†	82380.5	81913.4	5330.6 ug/L	5330.6 ppb	16:46:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	937247.7	99.269	%	0.7391				0.74%
Sc Radial	5258.5	98.7	%	1.17				1.18%
Y 371.029	781119.2	97.962	%	0.6382				0.65%
Y RADIAL	5547.2	98.27	%	1.045				1.06%
Ag 328.068†	112444.9	497.51	ug/L	3.284	497.51	ppb	3.284	0.66%
QC value within limits for Ag 328.068 Recovery = 99.50%								
Al 396.153Radial†	6374.3	5076.9	ug/L	69.59	5076.9	ppb	69.59	1.37%
QC value within limits for Al 396.153Radial Recovery = 101.54%								
As 188.979†	1211.5	497.06	ug/L	8.595	497.06	ppb	8.595	1.73%
QC value within limits for As 188.979 Recovery = 99.41%								
B 249.677†	22628.7	488.73	ug/L	2.705	488.73	ppb	2.705	0.55%
QC value within limits for B 249.677 Recovery = 97.75%								
Ba 233.527†	67816.3	497.05	ug/L	3.096	497.05	ppb	3.096	0.62%
QC value within limits for Ba 233.527 Recovery = 99.41%								
Be 313.107†	1401855.1	497.20	ug/L	0.519	497.20	ppb	0.519	0.10%
QC value within limits for Be 313.107 Recovery = 99.44%								
Ca 317.933Radial†	3029.7	5008.8	ug/L	83.78	5008.8	ppb	83.78	1.67%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.18%
Cd 226.502†            46307.6      494.26 ug/L         3.885      494.26 ppb          3.885   0.79%
   QC value within limits for Cd 226.502  Recovery = 98.85%
Co 228.616†            25432.4      496.32 ug/L         3.433      496.32 ppb          3.433   0.69%
   QC value within limits for Co 228.616  Recovery = 99.26%
Cr 267.716†            45370.4      497.02 ug/L         3.952      497.02 ppb          3.952   0.80%
   QC value within limits for Cr 267.716  Recovery = 99.40%
Cu 324.752†           169074.6      492.75 ug/L         3.357      492.75 ppb          3.357   0.68%
   QC value within limits for Cu 324.752  Recovery = 98.55%
Fe 238.204 Radial†       581.3      5034.3 ug/L        60.59      5034.3 ppb         60.59   1.20%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.69%
K 766.490 Radial†      23857.6      5039.8 ug/L        10.33      5039.8 ppb         10.33   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 100.80%
Mg 279.077 IEC†          157.2      5178.4 ug/L       137.36      5178.4 ppb        137.36   2.65%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.57%
Mn 257.610†           471509.0      499.32 ug/L         1.056      499.32 ppb          1.056   0.21%
   QC value within limits for Mn 257.610  Recovery = 99.86%
Mo 202.031†             7318.1      491.92 ug/L         5.377      491.92 ppb          5.377   1.09%
   QC value within limits for Mo 202.031  Recovery = 98.38%
Na 589.592 Radial†     36693.6      9859.1 ug/L       105.05      9859.1 ppb        105.05   1.07%
   QC value within limits for Na 589.592 Radial  Recovery = 98.59%
Ni 231.604†            20602.3      496.78 ug/L         4.567      496.78 ppb          4.567   0.92%
   QC value within limits for Ni 231.604  Recovery = 99.36%
P 214.914†              4233.3      2339.3 ug/L        29.40      2339.3 ppb         29.40   1.26%
   QC value within limits for P 214.914  Recovery = 93.57%
Pb 220.353†             4182.8      493.32 ug/L         5.227      493.32 ppb          5.227   1.06%
   QC value within limits for Pb 220.353  Recovery = 98.66%
S 181.975 Axial†         729.7      977.17 ug/L         5.738      977.17 ppb          5.738   0.59%
   QC value within limits for S 181.975 Axial  Recovery = 97.72%
Sb 206.836†             1464.3      500.02 ug/L         6.553      500.02 ppb          6.553   1.31%
   QC value within limits for Sb 206.836  Recovery = 100.00%
Se 196.026†              801.9      511.67 ug/L         7.302      511.67 ppb          7.302   1.43%
   QC value within limits for Se 196.026  Recovery = 102.33%
Si 251.611†            82179.2      2480.0 ug/L        16.24      2480.0 ppb         16.24   0.65%
   QC value within limits for Si 251.611  Recovery = 99.20%
Sn 189.927†             2928.0      490.95 ug/L         6.109      490.95 ppb          6.109   1.24%
   QC value within limits for Sn 189.927  Recovery = 98.19%
Sr 421.552†            79210.7      506.91 ug/L         5.296      506.91 ppb          5.296   1.04%
   QC value within limits for Sr 421.552  Recovery = 101.38%
Ti 334.940†           329161.2      497.94 ug/L         1.024      497.94 ppb          1.024   0.21%
   QC value within limits for Ti 334.940  Recovery = 99.59%
Tl 190.801†             1701.2      495.09 ug/L         6.118      495.09 ppb          6.118   1.24%
   QC value within limits for Tl 190.801  Recovery = 99.02%
U 409.014†             17508.7      494.13 ug/L         3.327      494.13 ppb          3.327   0.67%
   QC value within limits for U 409.014  Recovery = 98.83%
V 292.402†             75276.6      501.44 ug/L         3.336      501.44 ppb          3.336   0.67%
   QC value within limits for V 292.402  Recovery = 100.29%
Zn 213.857†            55014.5      491.33 ug/L         3.772      491.33 ppb          3.772   0.77%
   QC value within limits for Zn 213.857  Recovery = 98.27%
SiO2†                  82600.7      5375.4 ug/L        73.85      5375.4 ppb         73.85   1.37%
   QC value within limits for SiO2  Recovery = 100.52%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/18/2010 16:49:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5342.7	5342.7	100	%			16:50:53
1	Y RADIAL	5652.3	5652.3	100.1	%			16:50:53
1	Al 396.153Radial†	-3.8	-8.4	-6.6859	ug/L	-6.6859	ppb	16:50:53
1	Ca 317.933Radial†	15.2	-5.5	-9.0610	ug/L	-9.0610	ppb	16:51:13
1	Fe 238.204 Radial†	12.1	-0.8	-6.8261	ug/L	-6.8261	ppb	16:51:13
1	K 766.490 Radial†	2958.0	274.0	57.949	ug/L	57.949	ppb	16:50:53
1	Mg 279.077 IEC†	2.9	0.2	7.1117	ug/L	7.1117	ppb	16:51:13
1	Na 589.592 Radial†	-1098.9	3.0	0.8156	ug/L	0.8156	ppb	16:50:53
1	Sr 421.552†	13.2	1.5	0.0099	ug/L	0.0099	ppb	16:50:53
1	Sc 361.383	935368.3	935368.3	99.070	%			16:52:10
1	Y 371.029	791575.3	791575.3	99.273	%			16:52:10
1	Ag 328.068†	437.0	29.9	0.1299	ug/L	0.1299	ppb	16:52:15
1	As 188.979†	-15.0	4.4	1.7892	ug/L	1.7892	ppb	16:52:35
1	B 249.677†	-245.9	279.3	6.0611	ug/L	6.0611	ppb	16:52:35
1	Ba 233.527†	15.0	-4.5	-0.0357	ug/L	-0.0357	ppb	16:52:35
1	Be 313.107†	-4456.1	32.8	0.0119	ug/L	0.0119	ppb	16:52:15
1	Cd 226.502†	-203.6	11.4	0.1210	ug/L	0.1210	ppb	16:52:35
1	Co 228.616†	-70.0	2.7	0.0520	ug/L	0.0520	ppb	16:52:35
1	Cr 267.716†	79.3	-0.1	0.0000	ug/L	0.0000	ppb	16:52:35
1	Cu 324.752†	6126.0	17.0	0.0526	ug/L	0.0526	ppb	16:52:15
1	Mn 257.610†	459.3	8.0	0.0075	ug/L	0.0075	ppb	16:52:35
1	Mo 202.031†	11.5	-7.2	-0.4841	ug/L	-0.4841	ppb	16:52:35
1	Ni 231.604†	112.7	13.2	0.3187	ug/L	0.3187	ppb	16:52:35
1	P 214.914†	237.2	4.9	2.8057	ug/L	2.8057	ppb	16:52:35
1	Pb 220.353†	-46.8	6.5	0.7608	ug/L	0.7608	ppb	16:52:35
1	S 181.975 Axial†	36.9	-4.3	-5.7534	ug/L	-5.7534	ppb	16:52:35
1	Sb 206.836†	37.1	-1.3	-0.4414	ug/L	-0.4414	ppb	16:52:35
1	Se 196.026†	-22.5	10.1	6.1975	ug/L	6.1975	ppb	16:52:35
1	Si 251.611†	565.3	73.4	2.2270	ug/L	2.2270	ppb	16:52:35
1	Sn 189.927†	3.7	-3.8	-0.6360	ug/L	-0.6360	ppb	16:52:35
1	Ti 334.940†	-1303.0	73.6	0.1122	ug/L	0.1122	ppb	16:52:15
1	Tl 190.801†	-47.1	-8.8	-2.5322	ug/L	-2.5322	ppb	16:52:35
1	U 409.014†	-1839.5	-211.8	-5.9975	ug/L	-5.9975	ppb	16:52:10
1	V 292.402†	-1633.0	-170.8	-1.1402	ug/L	-1.1402	ppb	16:52:15
1	Zn 213.857†	754.9	54.3	0.4876	ug/L	0.4876	ppb	16:52:35
1	SiO2†	552.9	33.1	2.1717	ug/L	2.1717	ppb	16:53:41
2	Sc Radial	5421.2	5421.2	102	%			16:51:18
2	Y RADIAL	5726.5	5726.5	101.4	%			16:51:18
2	Al 396.153Radial†	-14.8	-19.2	-15.383	ug/L	-15.383	ppb	16:51:18
2	Ca 317.933Radial†	22.4	1.4	2.3395	ug/L	2.3395	ppb	16:51:38
2	Fe 238.204 Radial†	13.3	0.2	2.0763	ug/L	2.0763	ppb	16:51:38
2	K 766.490 Radial†	2863.5	138.4	29.258	ug/L	29.258	ppb	16:51:18
2	Mg 279.077 IEC†	0.7	-1.9	-63.481	ug/L	-63.481	ppb	16:51:38
2	Na 589.592 Radial†	-1082.6	34.9	9.3677	ug/L	9.3677	ppb	16:51:18
2	Sr 421.552†	-9.2	-20.7	-0.1322	ug/L	-0.1322	ppb	16:51:18
2	Sc 361.383	935114.9	935114.9	99.043	%			16:52:40
2	Y 371.029	791275.6	791275.6	99.236	%			16:52:40
2	Ag 328.068†	465.9	59.2	0.2666	ug/L	0.2666	ppb	16:52:45
2	As 188.979†	-21.4	-2.1	-0.8443	ug/L	-0.8443	ppb	16:53:05
2	B 249.677†	-276.9	247.9	5.3782	ug/L	5.3782	ppb	16:53:05
2	Ba 233.527†	14.9	-4.6	-0.0328	ug/L	-0.0328	ppb	16:53:05
2	Be 313.107†	-4403.3	84.9	0.0299	ug/L	0.0299	ppb	16:52:45
2	Cd 226.502†	-198.6	16.4	0.1740	ug/L	0.1740	ppb	16:53:05
2	Co 228.616†	-73.4	-0.7	-0.0115	ug/L	-0.0115	ppb	16:53:05
2	Cr 267.716†	116.6	37.6	0.4144	ug/L	0.4144	ppb	16:53:05
2	Cu 324.752†	6105.1	-2.4	-0.0039	ug/L	-0.0039	ppb	16:52:45
2	Mn 257.610†	462.7	11.6	0.0150	ug/L	0.0150	ppb	16:53:05
2	Mo 202.031†	29.4	10.8	0.7287	ug/L	0.7287	ppb	16:53:05
2	Ni 231.604†	118.6	19.3	0.4646	ug/L	0.4646	ppb	16:53:05

2	P 214.914†	230.5	-1.8	-1.0269 ug/L	-1.0269 ppb	16:53:05
2	Pb 220.353†	-43.0	10.3	1.2076 ug/L	1.2076 ppb	16:53:05
2	S 181.975 Axial†	44.9	3.8	5.0644 ug/L	5.0644 ppb	16:53:05
2	Sb 206.836†	38.7	0.4	0.1618 ug/L	0.1618 ppb	16:53:05
2	Se 196.026†	-32.3	0.2	0.1562 ug/L	0.1562 ppb	16:53:05
2	Si 251.611†	534.7	42.7	1.2841 ug/L	1.2841 ppb	16:53:05
2	Sn 189.927†	16.7	9.4	1.5665 ug/L	1.5665 ppb	16:53:05
2	Ti 334.940†	-1408.9	-33.8	-0.0434 ug/L	-0.0434 ppb	16:52:45
2	Tl 190.801†	-43.3	-5.0	-1.4373 ug/L	-1.4373 ppb	16:53:05
2	U 409.014†	-1815.3	-187.9	-5.3221 ug/L	-5.3221 ppb	16:52:40
2	V 292.402†	-1410.3	53.6	0.3511 ug/L	0.3511 ppb	16:52:45
2	Zn 213.857†	740.9	40.4	0.3606 ug/L	0.3606 ppb	16:53:05
2	SiO2†	544.0	24.3	1.5625 ug/L	1.5625 ppb	16:53:46
3	Sc Radial	4830.8	4830.8	90.7 %		16:51:43
3	Y RADIAL	5133.1	5133.1	90.93 %		16:51:43
3	Al 396.153Radial†	-7.2	-12.6	-10.134 ug/L	-10.134 ppb	16:51:43
3	Ca 317.933Radial†	17.9	-0.8	-1.3884 ug/L	-1.3884 ppb	16:52:03
3	Fe 238.204 Radial†	12.9	1.4	11.986 ug/L	11.986 ppb	16:52:03
3	K 766.490 Radial†	2815.0	428.7	90.700 ug/L	90.700 ppb	16:51:43
3	Mg 279.077 IEC†	3.1	0.7	24.233 ug/L	24.233 ppb	16:52:03
3	Na 589.592 Radial†	-1129.1	-146.4	-39.333 ug/L	-39.333 ppb	16:51:43
3	Sr 421.552†	34.0	25.8	0.1652 ug/L	0.1652 ppb	16:51:43
3	Sc 361.383	944661.7	944661.7	100.05 %		16:53:10
3	Y 371.029	799337.2	799337.2	100.25 %		16:53:10
3	Ag 328.068†	378.2	-33.2	-0.1377 ug/L	-0.1377 ppb	16:53:15
3	As 188.979†	-30.6	-11.0	-4.4633 ug/L	-4.4633 ppb	16:53:35
3	B 249.677†	-309.7	218.0	4.7270 ug/L	4.7270 ppb	16:53:35
3	Ba 233.527†	22.3	2.6	0.0195 ug/L	0.0195 ppb	16:53:35
3	Be 313.107†	-4467.5	65.7	0.0236 ug/L	0.0236 ppb	16:53:15
3	Cd 226.502†	-209.7	7.2	0.0752 ug/L	0.0752 ppb	16:53:35
3	Co 228.616†	-55.7	17.7	0.3458 ug/L	0.3458 ppb	16:53:35
3	Cr 267.716†	111.5	31.4	0.3457 ug/L	0.3457 ppb	16:53:35
3	Cu 324.752†	6163.1	-6.7	-0.0162 ug/L	-0.0162 ppb	16:53:15
3	Mn 257.610†	453.9	-1.9	-0.0018 ug/L	-0.0018 ppb	16:53:35
3	Mo 202.031†	26.9	8.1	0.5452 ug/L	0.5452 ppb	16:53:35
3	Ni 231.604†	112.1	11.5	0.2765 ug/L	0.2765 ppb	16:53:35
3	P 214.914†	217.3	-17.3	-9.9796 ug/L	-9.9796 ppb	16:53:35
3	Pb 220.353†	-46.3	7.5	0.8814 ug/L	0.8814 ppb	16:53:35
3	S 181.975 Axial†	42.1	0.6	0.7487 ug/L	0.7487 ppb	16:53:35
3	Sb 206.836†	49.5	10.8	3.5517 ug/L	3.5517 ppb	16:53:35
3	Se 196.026†	-32.4	0.5	0.3457 ug/L	0.3457 ppb	16:53:35
3	Si 251.611†	546.5	49.1	1.4777 ug/L	1.4777 ppb	16:53:35
3	Sn 189.927†	6.9	-0.5	-0.0909 ug/L	-0.0909 ppb	16:53:35
3	Ti 334.940†	-1272.8	116.7	0.1764 ug/L	0.1764 ppb	16:53:15
3	Tl 190.801†	-35.9	2.9	0.8248 ug/L	0.8248 ppb	16:53:35
3	U 409.014†	-1812.1	-166.2	-4.7089 ug/L	-4.7089 ppb	16:53:10
3	V 292.402†	-1457.9	20.5	0.1317 ug/L	0.1317 ppb	16:53:15
3	Zn 213.857†	748.7	40.7	0.3634 ug/L	0.3634 ppb	16:53:35
3	SiO2†	574.3	49.0	3.1834 ug/L	3.1834 ppb	16:53:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	938381.6	99.389	%	0.5762				0.58%
Sc Radial	5198.2	97.6	%	6.02				6.17%
Y 371.029	794062.7	99.585	%	0.5732				0.58%
Y RADIAL	5504.0	97.50	%	5.728				5.87%
Ag 328.068†	18.6	0.0863	ug/L	0.20568	0.0863	ppb	0.20568	238.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-13.4	-10.734	ug/L	4.3796	-10.734	ppb	4.3796	40.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.9	-1.1728	ug/L	3.13913	-1.1728	ppb	3.13913	267.66%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	248.4	5.3887	ug/L	0.66711	5.3887	ppb	0.66711	12.38%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.2	-0.0163	ug/L	0.03110	-0.0163	ppb	0.03110	190.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	61.1	0.0218	ug/L	0.00917	0.0218	ppb	0.00917	42.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.6	-2.7033	ug/L	5.81286	-2.7033	ppb	5.81286	215.03%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                11.7      0.1234 ug/L       0.04944      0.1234 ppb        0.04944  40.06%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.6      0.1288 ug/L       0.19061      0.1288 ppb        0.19061 148.04%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                23.0      0.2534 ug/L       0.22207      0.2534 ppb        0.22207  87.64%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                 2.7      0.0108 ug/L       0.03668      0.0108 ppb        0.03668 338.59%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.3      2.4122 ug/L       9.41075      2.4122 ppb        9.41075 390.13%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         280.4     59.302 ug/L      30.7436     59.302 ppb        30.7436  51.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.3    -10.712 ug/L      46.4940    -10.712 ppb        46.4940 434.03%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 5.9      0.0069 ug/L       0.00845      0.0069 ppb        0.00845 122.40%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 3.9      0.2633 ug/L       0.65372      0.2633 ppb        0.65372 248.32%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -36.2     -9.7166 ug/L      26.00275     -9.7166 ppb       26.00275 267.61%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                14.6      0.3533 ug/L       0.09868      0.3533 ppb        0.09868  27.93%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.7     -2.7336 ug/L       6.56127     -2.7336 ppb        6.56127 240.02%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 8.1      0.9499 ug/L       0.23114      0.9499 ppb        0.23114  24.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            0.0      0.0199 ug/L       5.44558      0.0199 ppb        5.44558 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.3      1.0907 ug/L       2.15249      1.0907 ppb        2.15249 197.35%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.6      2.2331 ug/L       3.43453      2.2331 ppb        3.43453 153.80%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                55.1      1.6629 ug/L       0.49800      1.6629 ppb        0.49800  29.95%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.7      0.2798 ug/L       1.14709      0.2798 ppb        1.14709 409.92%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 2.2      0.0143 ug/L       0.14874      0.0143 ppb        0.14874 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                52.2      0.0817 ug/L       0.11302      0.0817 ppb        0.11302 138.30%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -3.6     -1.0482 ug/L       1.71197     -1.0482 ppb        1.71197 163.32%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -188.6     -5.3428 ug/L       0.64456     -5.3428 ppb        0.64456  12.06%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -32.2     -0.2191 ug/L       0.80521     -0.2191 ppb        0.80521 367.49%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                45.1      0.4038 ug/L       0.07253      0.4038 ppb        0.07253  17.96%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      35.5      2.3059 ug/L       0.81872      2.3059 ppb        0.81872  35.51%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 4
Sample ID: 1202011708|940084|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 1/18/2010 16:56:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011708|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5435.7	5435.7	102	%			16:57:54
1	Y RADIAL	5732.5	5732.5	101.6	%			16:57:54
1	Al 396.153Radial†	-2.8	-7.4	-5.9229	ug/L	-5.9229	ppb	16:57:54
1	Ca 317.933Radial†	27.1	6.0	9.8442	ug/L	9.8442	ppb	16:58:14
1	Fe 238.204 Radial†	12.5	-0.6	-5.2981	ug/L	-5.2981	ppb	16:58:14
1	K 766.490 Radial†	2905.3	171.9	36.344	ug/L	36.344	ppb	16:57:54
1	Mg 279.077 IEC†	2.4	-0.3	-10.036	ug/L	-10.036	ppb	16:58:14
1	Na 589.592 Radial†	-1081.4	38.9	10.457	ug/L	10.457	ppb	16:57:54
1	Sr 421.552†	53.1	40.4	0.2583	ug/L	0.2583	ppb	16:57:54
1	Sc 361.383	957684.1	957684.1	101.43	%			16:59:10
1	Y 371.029	808668.9	808668.9	101.42	%			16:59:10
1	Ag 328.068†	438.5	21.1	0.0982	ug/L	0.0982	ppb	16:59:15
1	As 188.979†	-18.8	1.1	0.4462	ug/L	0.4462	ppb	16:59:35
1	B 249.677†	-365.4	167.3	3.6292	ug/L	3.6292	ppb	16:59:35
1	Ba 233.527†	17.3	-2.7	-0.0190	ug/L	-0.0190	ppb	16:59:35
1	Be 313.107†	-4339.0	253.1	0.0902	ug/L	0.0902	ppb	16:59:15
1	Cd 226.502†	-206.0	13.8	0.1462	ug/L	0.1462	ppb	16:59:35
1	Co 228.616†	-64.2	10.1	0.1962	ug/L	0.1962	ppb	16:59:35
1	Cr 267.716†	109.3	27.7	0.3068	ug/L	0.3068	ppb	16:59:35
1	Cu 324.752†	6075.7	-176.7	-0.5110	ug/L	-0.5110	ppb	16:59:15
1	Mn 257.610†	900.4	432.1	0.4572	ug/L	0.4572	ppb	16:59:35
1	Mo 202.031†	21.5	2.4	0.1633	ug/L	0.1633	ppb	16:59:35
1	Ni 231.604†	106.8	4.7	0.1140	ug/L	0.1140	ppb	16:59:35
1	P 214.914†	243.7	5.7	3.3558	ug/L	3.3558	ppb	16:59:35
1	Pb 220.353†	-51.2	3.3	0.3877	ug/L	0.3877	ppb	16:59:35
1	S 181.975 Axial†	49.0	6.8	9.0596	ug/L	9.0596	ppb	16:59:35
1	Sb 206.836†	58.7	19.2	6.3121	ug/L	6.3121	ppb	16:59:35
1	Se 196.026†	-38.0	-4.5	-2.7975	ug/L	-2.7975	ppb	16:59:35
1	Si 251.611†	747.2	239.5	7.2429	ug/L	7.2429	ppb	16:59:35
1	Sn 189.927†	7.4	-0.2	-0.0328	ug/L	-0.0328	ppb	16:59:35
1	Ti 334.940†	-1220.8	185.3	0.2857	ug/L	0.2857	ppb	16:59:15
1	Tl 190.801†	-36.2	3.0	0.8743	ug/L	0.8743	ppb	16:59:35
1	U 409.014†	-1939.5	-267.2	-7.5663	ug/L	-7.5663	ppb	16:59:10
1	V 292.402†	-1455.2	42.9	0.2701	ug/L	0.2701	ppb	16:59:15
1	Zn 213.857†	850.2	130.5	1.1765	ug/L	1.1765	ppb	16:59:35
1	SiO2†	765.8	230.0	14.998	ug/L	14.998	ppb	17:00:41
2	Sc Radial	5463.2	5463.2	103	%			16:58:19
2	Y RADIAL	5796.0	5796.0	102.7	%			16:58:19
2	Al 396.153Radial†	10.1	5.2	4.1074	ug/L	4.1074	ppb	16:58:19
2	Ca 317.933Radial†	21.2	0.1	0.1085	ug/L	0.1085	ppb	16:58:39
2	Fe 238.204 Radial†	13.4	0.3	2.4435	ug/L	2.4435	ppb	16:58:39
2	K 766.490 Radial†	2762.5	18.2	3.8477	ug/L	3.8477	ppb	16:58:19
2	Mg 279.077 IEC†	1.9	-0.8	-26.691	ug/L	-26.691	ppb	16:58:39
2	Na 589.592 Radial†	-1110.1	16.2	4.3513	ug/L	4.3513	ppb	16:58:19
2	Sr 421.552†	10.3	-1.7	-0.0106	ug/L	-0.0106	ppb	16:58:19
2	Sc 361.383	960975.6	960975.6	101.78	%			16:59:41
2	Y 371.029	811516.3	811516.3	101.77	%			16:59:41
2	Ag 328.068†	293.2	-123.2	-0.5367	ug/L	-0.5367	ppb	16:59:46
2	As 188.979†	-13.1	6.7	2.7194	ug/L	2.7194	ppb	17:00:06
2	B 249.677†	-371.0	163.0	3.5346	ug/L	3.5346	ppb	17:00:06
2	Ba 233.527†	10.8	-9.0	-0.0648	ug/L	-0.0648	ppb	17:00:06
2	Be 313.107†	-4475.1	134.0	0.0479	ug/L	0.0479	ppb	16:59:46
2	Cd 226.502†	-199.5	20.9	0.2220	ug/L	0.2220	ppb	17:00:06
2	Co 228.616†	-61.3	13.2	0.2576	ug/L	0.2576	ppb	17:00:06
2	Cr 267.716†	103.8	21.9	0.2417	ug/L	0.2417	ppb	17:00:06
2	Cu 324.752†	6169.1	-105.4	-0.3059	ug/L	-0.3059	ppb	16:59:46
2	Mn 257.610†	880.6	409.6	0.4348	ug/L	0.4348	ppb	17:00:06
2	Mo 202.031†	25.6	6.4	0.4298	ug/L	0.4298	ppb	17:00:06
2	Ni 231.604†	82.0	-20.0	-0.4821	ug/L	-0.4821	ppb	17:00:06

2	P 214.914†	241.7	2.9	1.7340 ug/L	1.7340 ppb	17:00:06
2	Pb 220.353†	-32.0	22.4	2.6294 ug/L	2.6294 ppb	17:00:06
2	S 181.975 Axial†	37.4	-4.8	-6.4201 ug/L	-6.4201 ppb	17:00:06
2	Sb 206.836†	57.2	17.5	5.7657 ug/L	5.7657 ppb	17:00:06
2	Se 196.026†	-30.2	3.3	2.0035 ug/L	2.0035 ppb	17:00:06
2	Si 251.611†	745.0	234.8	7.0977 ug/L	7.0977 ppb	17:00:06
2	Sn 189.927†	8.0	0.4	0.0640 ug/L	0.0640 ppb	17:00:06
2	Ti 334.940†	-1259.1	151.8	0.2327 ug/L	0.2327 ppb	16:59:46
2	Tl 190.801†	-43.1	-3.6	-1.0515 ug/L	-1.0515 ppb	17:00:06
2	U 409.014†	-1752.2	-76.6	-2.1693 ug/L	-2.1693 ppb	16:59:41
2	V 292.402†	-1416.8	85.6	0.5634 ug/L	0.5634 ppb	16:59:46
2	Zn 213.857†	834.1	111.8	1.0108 ug/L	1.0108 ppb	17:00:06
2	SiO2†	765.0	226.6	14.771 ug/L	14.771 ppb	17:00:46
3	Sc Radial	5495.4	5495.4	103 %		16:58:44
3	Y RADIAL	5790.5	5790.5	102.6 %		16:58:44
3	Al 396.153Radial†	-18.1	-22.2	-17.770 ug/L	-17.770 ppb	16:58:44
3	Ca 317.933Radial†	25.6	4.2	6.9323 ug/L	6.9323 ppb	16:59:04
3	Fe 238.204 Radial†	13.7	0.4	3.5794 ug/L	3.5794 ppb	16:59:04
3	K 766.490 Radial†	2832.3	70.1	14.832 ug/L	14.832 ppb	16:58:44
3	Mg 279.077 IEC†	3.8	1.1	35.675 ug/L	35.675 ppb	16:59:04
3	Na 589.592 Radial†	-1137.0	-3.4	-0.9255 ug/L	-0.9255 ppb	16:58:44
3	Sr 421.552†	18.6	6.3	0.0405 ug/L	0.0405 ppb	16:58:44
3	Sc 361.383	953600.6	953600.6	101.00 %		17:00:11
3	Y 371.029	805208.6	805208.6	100.98 %		17:00:11
3	Ag 328.068†	384.1	-31.0	-0.1306 ug/L	-0.1306 ppb	17:00:16
3	As 188.979†	-25.5	-5.7	-2.3145 ug/L	-2.3145 ppb	17:00:36
3	B 249.677†	-348.9	182.1	3.9495 ug/L	3.9495 ppb	17:00:36
3	Ba 233.527†	13.1	-6.7	-0.0481 ug/L	-0.0481 ppb	17:00:36
3	Be 313.107†	-4492.6	82.7	0.0298 ug/L	0.0298 ppb	17:00:16
3	Cd 226.502†	-197.5	21.3	0.2269 ug/L	0.2269 ppb	17:00:36
3	Co 228.616†	-75.3	-1.2	-0.0237 ug/L	-0.0237 ppb	17:00:36
3	Cr 267.716†	111.9	30.7	0.3378 ug/L	0.3378 ppb	17:00:36
3	Cu 324.752†	6204.2	-23.8	-0.0676 ug/L	-0.0676 ppb	17:00:16
3	Mn 257.610†	888.9	424.5	0.4481 ug/L	0.4481 ppb	17:00:36
3	Mo 202.031†	21.6	2.6	0.1719 ug/L	0.1719 ppb	17:00:36
3	Ni 231.604†	105.0	3.4	0.0827 ug/L	0.0827 ppb	17:00:36
3	P 214.914†	233.2	-3.6	-2.0871 ug/L	-2.0871 ppb	17:00:36
3	Pb 220.353†	-30.2	23.9	2.8049 ug/L	2.8049 ppb	17:00:36
3	S 181.975 Axial†	52.8	10.8	14.457 ug/L	14.457 ppb	17:00:36
3	Sb 206.836†	58.9	19.6	6.4757 ug/L	6.4757 ppb	17:00:36
3	Se 196.026†	-37.8	-4.5	-2.7547 ug/L	-2.7547 ppb	17:00:36
3	Si 251.611†	742.1	237.6	7.1863 ug/L	7.1863 ppb	17:00:36
3	Sn 189.927†	8.4	0.9	0.1438 ug/L	0.1438 ppb	17:00:36
3	Ti 334.940†	-1245.5	155.6	0.2347 ug/L	0.2347 ppb	17:00:16
3	Tl 190.801†	-40.9	-1.8	-0.5127 ug/L	-0.5127 ppb	17:00:36
3	U 409.014†	-1763.7	-101.3	-2.8689 ug/L	-2.8689 ppb	17:00:11
3	V 292.402†	-1414.6	76.9	0.5026 ug/L	0.5026 ppb	17:00:16
3	Zn 213.857†	849.6	133.5	1.2016 ug/L	1.2016 ppb	17:00:36
3	SiO2†	780.6	247.9	16.165 ug/L	16.165 ppb	17:00:51

Mean Data: 1202011708|940084|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	957420.1	101.41	%	0.391				0.39%
Sc Radial	5464.8	103	%	0.6				0.55%
Y 371.029	808464.6	101.39	%	0.396				0.39%
Y RADIAL	5773.0	102.3	%	0.62				0.61%
Ag 328.068†	-44.3	-0.1897	ug/L	0.32151	-0.1897	ppb	0.32151	169.48%
Al 396.153Radial†	-8.1	-6.5285	ug/L	10.95127	-6.5285	ppb	10.95127	167.75%
As 188.979†	0.7	0.2837	ug/L	2.52089	0.2837	ppb	2.52089	888.54%
B 249.677†	170.8	3.7044	ug/L	0.21745	3.7044	ppb	0.21745	5.87%
Ba 233.527†	-6.1	-0.0440	ug/L	0.02321	-0.0440	ppb	0.02321	52.79%
Be 313.107†	156.6	0.0560	ug/L	0.03099	0.0560	ppb	0.03099	55.36%
Ca 317.933Radial†	3.4	5.6283	ug/L	4.99715	5.6283	ppb	4.99715	88.79%
Cd 226.502†	18.7	0.1984	ug/L	0.04524	0.1984	ppb	0.04524	22.80%
Co 228.616†	7.4	0.1434	ug/L	0.14794	0.1434	ppb	0.14794	103.19%
Cr 267.716†	26.8	0.2954	ug/L	0.04906	0.2954	ppb	0.04906	16.61%
Cu 324.752†	-102.0	-0.2948	ug/L	0.22190	-0.2948	ppb	0.22190	75.27%
Fe 238.204 Radial†	0.0	0.2416	ug/L	4.83101	0.2416	ppb	4.83101	>999.9%
K 766.490 Radial†	86.7	18.341	ug/L	16.5297	18.341	ppb	16.5297	90.12%

Mg 279.077 IEC†	-0.0	-0.3504	ug/L	32.29113	-0.3504	ppb	32.29113	>999.9%
Mn 257.610†	422.0	0.4467	ug/L	0.01126	0.4467	ppb	0.01126	2.52%
Mo 202.031†	3.8	0.2550	ug/L	0.15142	0.2550	ppb	0.15142	59.38%
Na 589.592 Radial†	17.2	4.6275	ug/L	5.69605	4.6275	ppb	5.69605	123.09%
Ni 231.604†	-3.9	-0.0951	ug/L	0.33552	-0.0951	ppb	0.33552	352.70%
P 214.914†	1.6	1.0009	ug/L	2.79451	1.0009	ppb	2.79451	279.19%
Pb 220.353†	16.5	1.9407	ug/L	1.34776	1.9407	ppb	1.34776	69.45%
S 181.975 Axial†	4.3	5.6988	ug/L	10.83665	5.6988	ppb	10.83665	190.16%
Sb 206.836†	18.8	6.1845	ug/L	0.37185	6.1845	ppb	0.37185	6.01%
Se 196.026†	-1.9	-1.1829	ug/L	2.75959	-1.1829	ppb	2.75959	233.29%
Si 251.611†	237.3	7.1756	ug/L	0.07318	7.1756	ppb	0.07318	1.02%
Sn 189.927†	0.3	0.0583	ug/L	0.08844	0.0583	ppb	0.08844	151.65%
Sr 421.552†	15.0	0.0961	ug/L	0.14281	0.0961	ppb	0.14281	148.68%
Ti 334.940†	164.2	0.2510	ug/L	0.03008	0.2510	ppb	0.03008	11.98%
Tl 190.801†	-0.8	-0.2300	ug/L	0.99358	-0.2300	ppb	0.99358	432.04%
U 409.014†	-148.3	-4.2015	ug/L	2.93489	-4.2015	ppb	2.93489	69.85%
V 292.402†	68.5	0.4453	ug/L	0.15480	0.4453	ppb	0.15480	34.76%
Zn 213.857†	125.3	1.1296	ug/L	0.10370	1.1296	ppb	0.10370	9.18%
SiO2†	234.8	15.311	ug/L	0.7477	15.311	ppb	0.7477	4.88%

Sequence No.: 5
Sample ID: 1202011709|940084|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 1/18/2010 17:03:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011709|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5375.9	5375.9	101	%			17:04:55
1	Y RADIAL	5661.4	5661.4	100.3	%			17:04:55
1	Al 396.153Radial†	6443.6	6380.5	5082.3	ug/L	5082.3	ppb	17:04:55
1	Ca 317.933Radial†	3075.6	3027.1	5004.4	ug/L	5004.4	ppb	17:05:15
1	Fe 238.204 Radial†	602.5	584.2	5059.2	ug/L	5059.2	ppb	17:05:15
1	K 766.490 Radial†	26652.7	23735.2	5015.8	ug/L	5015.8	ppb	17:04:55
1	Mg 279.077 IEC†	162.0	157.9	5202.3	ug/L	5202.3	ppb	17:05:15
1	Na 589.592 Radial†	18468.8	19399.9	5212.5	ug/L	5212.5	ppb	17:04:55
1	Sr 421.552†	81765.9	81011.9	518.44	ug/L	518.44	ppb	17:04:55
1	Sc 361.383	949426.0	949426.0	100.56	%			17:06:14
1	Y 371.029	793411.5	793411.5	99.504	%			17:06:14
1	Ag 328.068†	110881.4	109854.0	486.11	ug/L	486.11	ppb	17:06:14
1	As 188.979†	1200.4	1213.3	497.75	ug/L	497.75	ppb	17:06:34
1	B 249.677†	21767.8	22174.3	478.91	ug/L	478.91	ppb	17:06:14
1	Ba 233.527†	68336.0	67936.5	497.92	ug/L	497.92	ppb	17:06:14
1	Be 313.107†	1397739.4	1394502.0	494.58	ug/L	494.58	ppb	17:06:14
1	Cd 226.502†	44842.8	44810.4	478.27	ug/L	478.27	ppb	17:06:34
1	Co 228.616†	24680.4	24616.7	480.40	ug/L	480.40	ppb	17:06:34
1	Cr 267.716†	44889.2	44559.7	488.15	ug/L	488.15	ppb	17:06:14
1	Cu 324.752†	177030.1	169879.8	495.10	ug/L	495.10	ppb	17:06:14
1	Mn 257.610†	473141.3	470056.2	497.79	ug/L	497.79	ppb	17:06:14
1	Mo 202.031†	7267.0	7207.8	484.51	ug/L	484.51	ppb	17:06:34
1	Ni 231.604†	20586.9	20372.0	491.23	ug/L	491.23	ppb	17:06:34
1	P 214.914†	1199.2	958.0	454.70	ug/L	454.70	ppb	17:06:34
1	Pb 220.353†	4198.2	4228.6	498.69	ug/L	498.69	ppb	17:06:34
1	S 181.975 Axial†	3725.5	3663.3	4909.8	ug/L	4909.8	ppb	17:06:34
1	Sb 206.836†	1563.2	1515.8	517.04	ug/L	517.04	ppb	17:06:34
1	Se 196.026†	767.7	796.3	508.31	ug/L	508.31	ppb	17:06:34
1	Si 251.611†	159473.5	158090.0	4776.6	ug/L	4776.6	ppb	17:06:14
1	Sn 189.927†	3031.9	3007.6	504.27	ug/L	504.27	ppb	17:06:34
1	Ti 334.940†	324849.1	324432.5	490.79	ug/L	490.79	ppb	17:06:14
1	Tl 190.801†	1679.8	1709.2	497.41	ug/L	497.41	ppb	17:06:34
1	U 409.014†	15762.9	17320.2	488.81	ug/L	488.81	ppb	17:06:14
1	V 292.402†	73525.5	74594.5	496.85	ug/L	496.85	ppb	17:06:14
1	Zn 213.857†	54882.4	53869.7	481.04	ug/L	481.04	ppb	17:06:14
1	SiO2†	162027.7	160602.3	10464	ug/L	10464	ppb	17:07:34
2	Sc Radial	5449.8	5449.8	102	%			17:05:20
2	Y RADIAL	5673.3	5673.3	100.5	%			17:05:20
2	Al 396.153Radial†	6348.8	6201.3	4939.3	ug/L	4939.3	ppb	17:05:20
2	Ca 317.933Radial†	3072.6	2982.9	4931.4	ug/L	4931.4	ppb	17:05:40
2	Fe 238.204 Radial†	608.5	581.9	5039.0	ug/L	5039.0	ppb	17:05:40
2	K 766.490 Radial†	26303.9	23036.5	4868.1	ug/L	4868.1	ppb	17:05:20
2	Mg 279.077 IEC†	161.7	155.4	5118.6	ug/L	5118.6	ppb	17:05:40
2	Na 589.592 Radial†	18170.0	18859.7	5067.4	ug/L	5067.4	ppb	17:05:20
2	Sr 421.552†	80857.4	79026.0	505.73	ug/L	505.73	ppb	17:05:20
2	Sc 361.383	961896.1	961896.1	101.88	%			17:06:41
2	Y 371.029	803079.9	803079.9	100.72	%			17:06:41
2	Ag 328.068†	112342.8	109858.9	486.13	ug/L	486.13	ppb	17:06:41
2	As 188.979†	1185.2	1182.9	485.40	ug/L	485.40	ppb	17:07:01
2	B 249.677†	22281.6	22398.1	483.80	ug/L	483.80	ppb	17:06:41
2	Ba 233.527†	69296.4	67998.2	498.37	ug/L	498.37	ppb	17:06:41
2	Be 313.107†	1416792.0	1395183.4	494.83	ug/L	494.83	ppb	17:06:41
2	Cd 226.502†	44523.5	43918.9	468.75	ug/L	468.75	ppb	17:07:01
2	Co 228.616†	24460.8	24082.9	469.97	ug/L	469.97	ppb	17:07:01
2	Cr 267.716†	45483.5	44564.3	488.20	ug/L	488.20	ppb	17:06:41
2	Cu 324.752†	179549.1	170070.0	495.65	ug/L	495.65	ppb	17:06:41
2	Mn 257.610†	479565.3	470261.9	498.01	ug/L	498.01	ppb	17:06:41
2	Mo 202.031†	7228.5	7076.3	475.68	ug/L	475.68	ppb	17:07:01
2	Ni 231.604†	20455.3	19977.4	481.72	ug/L	481.72	ppb	17:07:01

2	P 214.914†	1200.1	943.4	446.10 ug/L	446.10 ppb	17:07:01
2	Pb 220.353†	4153.7	4130.8	487.14 ug/L	487.14 ppb	17:07:01
2	S 181.975 Axial†	3697.9	3588.1	4809.1 ug/L	4809.1 ppb	17:07:01
2	Sb 206.836†	1545.2	1478.0	504.29 ug/L	504.29 ppb	17:07:01
2	Se 196.026†	753.2	772.2	493.40 ug/L	493.40 ppb	17:07:01
2	Si 251.611†	161841.0	158358.0	4784.8 ug/L	4784.8 ppb	17:06:41
2	Sn 189.927†	3024.7	2961.4	496.54 ug/L	496.54 ppb	17:07:01
2	Ti 334.940†	329233.2	324547.7	490.96 ug/L	490.96 ppb	17:06:41
2	Tl 190.801†	1669.1	1677.1	488.16 ug/L	488.16 ppb	17:07:01
2	U 409.014†	15944.1	17294.9	488.09 ug/L	488.09 ppb	17:06:41
2	V 292.402†	74668.8	74768.7	497.87 ug/L	497.87 ppb	17:06:41
2	Zn 213.857†	55631.6	53897.5	481.35 ug/L	481.35 ppb	17:06:41
2	SiO2†	160359.0	156875.5	10221 ug/L	10221 ppb	17:07:39
3	Sc Radial	5359.8	5359.8	101 %		17:05:45
3	Y RADIAL	5663.7	5663.7	100.3 %		17:05:45
3	Al 396.153Radial†	6265.4	6222.6	4956.0 ug/L	4956.0 ppb	17:05:45
3	Ca 317.933Radial†	3071.7	3032.4	5013.3 ug/L	5013.3 ppb	17:06:05
3	Fe 238.204 Radial†	603.6	587.1	5084.1 ug/L	5084.1 ppb	17:06:05
3	K 766.490 Radial†	26147.7	23313.1	4926.5 ug/L	4926.5 ppb	17:05:45
3	Mg 279.077 IEC†	155.5	151.9	5003.7 ug/L	5003.7 ppb	17:06:05
3	Na 589.592 Radial†	17829.1	18819.3	5056.5 ug/L	5056.5 ppb	17:05:45
3	Sr 421.552†	79621.6	79125.4	506.37 ug/L	506.37 ppb	17:05:45
3	Sc 361.383	949131.0	949131.0	100.53 %		17:07:08
3	Y 371.029	792210.3	792210.3	99.353 %		17:07:08
3	Ag 328.068†	111012.7	110018.8	486.85 ug/L	486.85 ppb	17:07:08
3	As 188.979†	1204.6	1217.9	499.61 ug/L	499.61 ppb	17:07:28
3	B 249.677†	21985.5	22397.6	483.76 ug/L	483.76 ppb	17:07:08
3	Ba 233.527†	68580.0	68200.4	499.85 ug/L	499.85 ppb	17:07:08
3	Be 313.107†	1397702.7	1394897.5	494.72 ug/L	494.72 ppb	17:07:08
3	Cd 226.502†	44575.0	44557.9	475.57 ug/L	475.57 ppb	17:07:28
3	Co 228.616†	24541.0	24485.6	477.84 ug/L	477.84 ppb	17:07:28
3	Cr 267.716†	44996.1	44679.9	489.46 ug/L	489.46 ppb	17:07:08
3	Cu 324.752†	176881.2	169786.3	494.83 ug/L	494.83 ppb	17:07:08
3	Mn 257.610†	474003.5	471060.1	498.86 ug/L	498.86 ppb	17:07:08
3	Mo 202.031†	7245.5	7188.7	483.23 ug/L	483.23 ppb	17:07:28
3	Ni 231.604†	20470.5	20262.6	488.59 ug/L	488.59 ppb	17:07:28
3	P 214.914†	1205.6	964.7	458.56 ug/L	458.56 ppb	17:07:28
3	Pb 220.353†	4168.2	4200.1	495.30 ug/L	495.30 ppb	17:07:28
3	S 181.975 Axial†	3704.4	3643.4	4883.2 ug/L	4883.2 ppb	17:07:28
3	Sb 206.836†	1551.4	1504.6	513.28 ug/L	513.28 ppb	17:07:28
3	Se 196.026†	767.3	796.2	508.29 ug/L	508.29 ppb	17:07:28
3	Si 251.611†	159812.9	158476.9	4788.3 ug/L	4788.3 ppb	17:07:08
3	Sn 189.927†	3019.1	2995.8	502.30 ug/L	502.30 ppb	17:07:28
3	Ti 334.940†	324941.4	324624.7	491.10 ug/L	491.10 ppb	17:07:08
3	Tl 190.801†	1674.2	1704.2	495.96 ug/L	495.96 ppb	17:07:28
3	U 409.014†	15739.0	17301.3	488.27 ug/L	488.27 ppb	17:07:08
3	V 292.402†	73584.2	74675.6	497.36 ug/L	497.36 ppb	17:07:08
3	Zn 213.857†	55045.6	54049.1	482.67 ug/L	482.67 ppb	17:07:08
3	SiO2†	159864.2	158500.1	10327 ug/L	10327 ppb	17:07:45

Mean Data: 1202011709|940084|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	953484.4	100.99	%	0.772				0.76%
Sc Radial	5395.2	101	%	0.9				0.89%
Y 371.029	796233.9	99.858	%	0.7473				0.75%
Y RADIAL	5666.1	100.4	%	0.11				0.11%
Ag 328.068†	109910.6	486.36	ug/L	0.418	486.36	ppb	0.418	0.09%
Al 396.153Radial†	6268.1	4992.5	ug/L	78.18	4992.5	ppb	78.18	1.57%
As 188.979†	1204.7	494.25	ug/L	7.723	494.25	ppb	7.723	1.56%
B 249.677†	22323.3	482.16	ug/L	2.810	482.16	ppb	2.810	0.58%
Ba 233.527†	68045.0	498.71	ug/L	1.010	498.71	ppb	1.010	0.20%
Be 313.107†	1394861.0	494.71	ug/L	0.121	494.71	ppb	0.121	0.02%
Ca 317.933Radial†	3014.1	4983.0	ug/L	44.94	4983.0	ppb	44.94	0.90%
Cd 226.502†	44429.1	474.20	ug/L	4.907	474.20	ppb	4.907	1.03%
Co 228.616†	24395.1	476.07	ug/L	5.438	476.07	ppb	5.438	1.14%
Cr 267.716†	44601.3	488.60	ug/L	0.746	488.60	ppb	0.746	0.15%
Cu 324.752†	169912.0	495.19	ug/L	0.420	495.19	ppb	0.420	0.08%
Fe 238.204 Radial†	584.4	5060.8	ug/L	22.55	5060.8	ppb	22.55	0.45%
K 766.490 Radial†	23361.6	4936.8	ug/L	74.38	4936.8	ppb	74.38	1.51%

Mg 279.077 IEC†	155.1	5108.2 ug/L	99.70	5108.2 ppb	99.70	1.95%
Mn 257.610†	470459.4	498.22 ug/L	0.567	498.22 ppb	0.567	0.11%
Mo 202.031†	7157.6	481.14 ug/L	4.773	481.14 ppb	4.773	0.99%
Na 589.592 Radial†	19026.3	5112.1 ug/L	87.09	5112.1 ppb	87.09	1.70%
Ni 231.604†	20204.0	487.18 ug/L	4.912	487.18 ppb	4.912	1.01%
P 214.914†	955.3	453.12 ug/L	6.375	453.12 ppb	6.375	1.41%
Pb 220.353†	4186.5	493.71 ug/L	5.936	493.71 ppb	5.936	1.20%
S 181.975 Axial†	3631.6	4867.3 ug/L	52.19	4867.3 ppb	52.19	1.07%
Sb 206.836†	1499.5	511.54 ug/L	6.553	511.54 ppb	6.553	1.28%
Se 196.026†	788.3	503.33 ug/L	8.601	503.33 ppb	8.601	1.71%
Si 251.611†	158308.3	4783.2 ug/L	6.02	4783.2 ppb	6.02	0.13%
Sn 189.927†	2988.3	501.04 ug/L	4.018	501.04 ppb	4.018	0.80%
Sr 421.552†	79721.1	510.18 ug/L	7.161	510.18 ppb	7.161	1.40%
Ti 334.940†	324535.0	490.95 ug/L	0.154	490.95 ppb	0.154	0.03%
Tl 190.801†	1696.8	493.84 ug/L	4.977	493.84 ppb	4.977	1.01%
U 409.014†	17305.5	488.39 ug/L	0.372	488.39 ppb	0.372	0.08%
V 292.402†	74679.6	497.36 ug/L	0.510	497.36 ppb	0.510	0.10%
Zn 213.857†	53938.8	481.69 ug/L	0.865	481.69 ppb	0.865	0.18%
SiO2†	158659.3	10338 ug/L	121.8	10338 ppb	121.8	1.18%

Sequence No.: 12
Sample ID: 1202011710|940084|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 1/18/2010 17:52:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011710|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6199.1	6199.1	116	%			17:53:54
1	Y RADIAL	6571.2	6571.2	116.4	%			17:53:54
1	Al 396.153Radial†	353.1	298.8	239.15	ug/L	239.15	ppb	17:53:54
1	Ca 317.933Radial†	58.2	29.4	48.632	ug/L	48.632	ppb	17:54:14
1	Fe 238.204 Radial†	28.9	12.0	103.63	ug/L	103.63	ppb	17:54:14
1	K 766.490 Radial†	3501.5	333.6	70.461	ug/L	70.461	ppb	17:53:54
1	Mg 279.077 IEC†	2.1	-0.8	-27.265	ug/L	-27.265	ppb	17:54:14
1	Na 589.592 Radial†	-472.9	692.3	186.01	ug/L	186.01	ppb	17:53:54
1	Sr 421.552†	103.9	77.6	0.4963	ug/L	0.4963	ppb	17:53:54
1	Sc 361.383	967431.7	967431.7	102.47	%			17:55:11
1	Y 371.029	815251.2	815251.2	102.24	%			17:55:11
1	Ag 328.068†	356.1	-63.7	-0.2434	ug/L	-0.2434	ppb	17:55:16
1	As 188.979†	-28.0	-7.8	-3.0719	ug/L	-3.0719	ppb	17:55:36
1	B 249.677†	241.0	762.7	16.531	ug/L	16.531	ppb	17:55:16
1	Ba 233.527†	459.5	428.7	3.1393	ug/L	3.1393	ppb	17:55:36
1	Be 313.107†	-4420.6	216.5	0.0926	ug/L	0.0926	ppb	17:55:16
1	Cd 226.502†	-199.4	22.3	0.2277	ug/L	0.2277	ppb	17:55:36
1	Co 228.616†	-63.1	11.8	0.2143	ug/L	0.2143	ppb	17:55:36
1	Cr 267.716†	186.0	101.5	1.1134	ug/L	1.1134	ppb	17:55:36
1	Cu 324.752†	7158.1	819.4	2.3938	ug/L	2.3938	ppb	17:55:16
1	Mn 257.610†	5865.0	5268.3	5.5873	ug/L	5.5873	ppb	17:55:16
1	Mo 202.031†	11.2	-7.8	-0.5163	ug/L	-0.5163	ppb	17:55:36
1	Ni 231.604†	150.1	46.0	1.1086	ug/L	1.1086	ppb	17:55:36
1	P 214.914†	245.6	5.1	2.4558	ug/L	2.4558	ppb	17:55:36
1	Pb 220.353†	-54.9	0.2	0.0614	ug/L	0.0614	ppb	17:55:36
1	S 181.975 Axial†	77.0	33.6	44.997	ug/L	44.997	ppb	17:55:36
1	Sb 206.836†	39.7	0.1	-0.0116	ug/L	-0.0116	ppb	17:55:36
1	Se 196.026†	-33.2	0.5	0.7164	ug/L	0.7164	ppb	17:55:36
1	Si 251.611†	40849.4	39369.2	1191.0	ug/L	1191.0	ppb	17:55:16
1	Sn 189.927†	10.2	2.5	0.4279	ug/L	0.4279	ppb	17:55:36
1	Ti 334.940†	3354.7	4662.8	7.0643	ug/L	7.0643	ppb	17:55:16
1	Tl 190.801†	-40.8	-1.1	-0.2345	ug/L	-0.2345	ppb	17:55:36
1	U 409.014†	-1699.9	-14.0	-0.4120	ug/L	-0.4120	ppb	17:55:11
1	V 292.402†	-1385.5	125.4	0.7927	ug/L	0.7927	ppb	17:55:16
1	Zn 213.857†	1019.9	287.6	2.5710	ug/L	2.5710	ppb	17:55:36
1	SiO2†	40890.0	39381.0	2569.2	ug/L	2569.2	ppb	17:56:42
2	Sc Radial	5633.0	5633.0	106	%			17:54:19
2	Y RADIAL	5963.2	5963.2	105.6	%			17:54:19
2	Al 396.153Radial†	347.6	324.1	259.33	ug/L	259.33	ppb	17:54:19
2	Ca 317.933Radial†	57.9	34.2	56.477	ug/L	56.477	ppb	17:54:39
2	Fe 238.204 Radial†	34.9	20.2	174.41	ug/L	174.41	ppb	17:54:39
2	K 766.490 Radial†	3591.4	720.9	152.40	ug/L	152.40	ppb	17:54:19
2	Mg 279.077 IEC†	4.9	2.0	65.063	ug/L	65.063	ppb	17:54:39
2	Na 589.592 Radial†	-535.5	592.3	159.14	ug/L	159.14	ppb	17:54:19
2	Sr 421.552†	107.3	89.8	0.5742	ug/L	0.5742	ppb	17:54:19
2	Sc 361.383	970807.0	970807.0	102.82	%			17:55:41
2	Y 371.029	818752.3	818752.3	102.68	%			17:55:41
2	Ag 328.068†	397.0	-25.1	-0.0526	ug/L	-0.0526	ppb	17:55:46
2	As 188.979†	-25.8	-5.6	-2.1572	ug/L	-2.1572	ppb	17:56:07
2	B 249.677†	208.8	730.6	15.821	ug/L	15.821	ppb	17:55:46
2	Ba 233.527†	474.8	442.1	3.2391	ug/L	3.2391	ppb	17:56:07
2	Be 313.107†	-4496.1	158.1	0.0715	ug/L	0.0715	ppb	17:55:46
2	Cd 226.502†	-213.5	9.2	0.0808	ug/L	0.0808	ppb	17:56:07
2	Co 228.616†	-56.7	18.3	0.3399	ug/L	0.3399	ppb	17:56:07
2	Cr 267.716†	207.9	122.1	1.3402	ug/L	1.3402	ppb	17:56:07
2	Cu 324.752†	7178.9	815.3	2.3846	ug/L	2.3846	ppb	17:55:46
2	Mn 257.610†	5831.0	5215.3	5.5344	ug/L	5.5344	ppb	17:55:46
2	Mo 202.031†	14.7	-4.5	-0.2886	ug/L	-0.2886	ppb	17:56:07
2	Ni 231.604†	139.3	34.9	0.8419	ug/L	0.8419	ppb	17:56:07

2	P 214.914†	243.9	2.7	0.9824 ug/L	0.9824 ppb	17:56:07
2	Pb 220.353†	-51.2	4.0	0.5028 ug/L	0.5028 ppb	17:56:07
2	S 181.975 Axial†	69.8	26.4	35.342 ug/L	35.342 ppb	17:56:07
2	Sb 206.836†	35.4	-4.3	-1.4379 ug/L	-1.4379 ppb	17:56:07
2	Se 196.026†	-23.2	10.4	7.0104 ug/L	7.0104 ppb	17:56:07
2	Si 251.611†	40900.0	39279.7	1188.3 ug/L	1188.3 ppb	17:55:46
2	Sn 189.927†	6.1	-1.6	-0.2540 ug/L	-0.2540 ppb	17:56:07
2	Ti 334.940†	3242.1	4541.9	6.8741 ug/L	6.8741 ppb	17:55:46
2	Tl 190.801†	-34.1	5.6	1.7052 ug/L	1.7052 ppb	17:56:07
2	U 409.014†	-1645.1	45.0	1.2519 ug/L	1.2519 ppb	17:55:41
2	V 292.402†	-1404.0	112.1	0.7034 ug/L	0.7034 ppb	17:55:46
2	Zn 213.857†	1026.1	290.2	2.5892 ug/L	2.5892 ppb	17:56:07
2	SiO2†	40959.3	39309.6	2564.5 ug/L	2564.5 ppb	17:56:47
3	Sc Radial	5614.8	5614.8	105 %		17:54:45
3	Y RADIAL	5939.4	5939.4	105.2 %		17:54:45
3	Al 396.153Radial†	340.1	318.0	254.48 ug/L	254.48 ppb	17:54:45
3	Ca 317.933Radial†	58.0	34.4	56.930 ug/L	56.930 ppb	17:55:05
3	Fe 238.204 Radial†	28.2	14.0	120.57 ug/L	120.57 ppb	17:55:05
3	K 766.490 Radial†	3535.1	678.5	143.43 ug/L	143.43 ppb	17:54:45
3	Mg 279.077 IEC†	5.5	2.5	83.133 ug/L	83.133 ppb	17:55:05
3	Na 589.592 Radial†	-516.5	608.7	163.54 ug/L	163.54 ppb	17:54:45
3	Sr 421.552†	124.0	106.0	0.6777 ug/L	0.6777 ppb	17:54:45
3	Sc 361.383	955117.4	955117.4	101.16 %		17:56:12
3	Y 371.029	805147.9	805147.9	100.98 %		17:56:12
3	Ag 328.068†	492.3	75.4	0.3714 ug/L	0.3714 ppb	17:56:17
3	As 188.979†	-27.0	-7.1	-2.8090 ug/L	-2.8090 ppb	17:56:37
3	B 249.677†	154.0	679.7	14.727 ug/L	14.727 ppb	17:56:17
3	Ba 233.527†	477.9	452.7	3.3141 ug/L	3.3141 ppb	17:56:37
3	Be 313.107†	-4498.6	83.8	0.0453 ug/L	0.0453 ppb	17:56:17
3	Cd 226.502†	-199.1	20.1	0.2026 ug/L	0.2026 ppb	17:56:37
3	Co 228.616†	-61.5	12.6	0.2307 ug/L	0.2307 ppb	17:56:37
3	Cr 267.716†	202.7	120.3	1.3193 ug/L	1.3193 ppb	17:56:37
3	Cu 324.752†	7039.5	792.2	2.3151 ug/L	2.3151 ppb	17:56:17
3	Mn 257.610†	5823.8	5301.4	5.6194 ug/L	5.6194 ppb	17:56:17
3	Mo 202.031†	23.5	4.5	0.3090 ug/L	0.3090 ppb	17:56:37
3	Ni 231.604†	153.6	51.3	1.2385 ug/L	1.2385 ppb	17:56:37
3	P 214.914†	244.3	6.9	3.4946 ug/L	3.4946 ppb	17:56:37
3	Pb 220.353†	-35.5	18.7	2.2395 ug/L	2.2395 ppb	17:56:37
3	S 181.975 Axial†	81.0	38.5	51.594 ug/L	51.594 ppb	17:56:37
3	Sb 206.836†	36.9	-2.2	-0.7324 ug/L	-0.7324 ppb	17:56:37
3	Se 196.026†	-25.5	7.7	5.1668 ug/L	5.1668 ppb	17:56:37
3	Si 251.611†	40899.3	39932.5	1208.0 ug/L	1208.0 ppb	17:56:17
3	Sn 189.927†	10.3	2.7	0.4644 ug/L	0.4644 ppb	17:56:37
3	Ti 334.940†	3204.0	4556.0	6.8945 ug/L	6.8945 ppb	17:56:17
3	Tl 190.801†	-40.5	-1.3	-0.2975 ug/L	-0.2975 ppb	17:56:37
3	U 409.014†	-1659.4	4.6	0.1138 ug/L	0.1138 ppb	17:56:12
3	V 292.402†	-1436.2	57.8	0.3610 ug/L	0.3610 ppb	17:56:17
3	Zn 213.857†	1023.9	304.4	2.7201 ug/L	2.7201 ppb	17:56:37
3	SiO2†	40452.5	39463.0	2574.5 ug/L	2574.5 ppb	17:56:52

Mean Data: 1202011710|940084|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	964452.0	102.15	%	0.875				0.86%
Sc Radial	5815.6	109	%	6.2				5.71%
Y 371.029	813050.5	101.97	%	0.886				0.87%
Y RADIAL	6158.0	109.1	%	6.34				5.82%
Ag 328.068†	-4.4	0.0251	ug/L	0.31465	0.0251	ppb	0.31465	>999.9%
Al 396.153Radial†	313.6	250.99	ug/L	10.535	250.99	ppb	10.535	4.20%
As 188.979†	-6.8	-2.6794	ug/L	0.47091	-2.6794	ppb	0.47091	17.58%
B 249.677†	724.3	15.693	ug/L	0.9092	15.693	ppb	0.9092	5.79%
Ba 233.527†	441.2	3.2308	ug/L	0.08773	3.2308	ppb	0.08773	2.72%
Be 313.107†	152.8	0.0698	ug/L	0.02371	0.0698	ppb	0.02371	33.96%
Ca 317.933Radial†	32.7	54.013	ug/L	4.6657	54.013	ppb	4.6657	8.64%
Cd 226.502†	17.2	0.1703	ug/L	0.07858	0.1703	ppb	0.07858	46.13%
Co 228.616†	14.2	0.2616	ug/L	0.06825	0.2616	ppb	0.06825	26.09%
Cr 267.716†	114.6	1.2576	ug/L	0.12532	1.2576	ppb	0.12532	9.96%
Cu 324.752†	809.0	2.3645	ug/L	0.04299	2.3645	ppb	0.04299	1.82%
Fe 238.204 Radial†	15.4	132.87	ug/L	36.954	132.87	ppb	36.954	27.81%
K 766.490 Radial†	577.7	122.10	ug/L	44.943	122.10	ppb	44.943	36.81%

Mg 279.077 IEC†	1.2	40.310	ug/L	59.2155	40.310	ppb	59.2155 146.90%
Mn 257.610†	5261.7	5.5804	ug/L	0.04293	5.5804	ppb	0.04293 0.77%
Mo 202.031†	-2.6	-0.1653	ug/L	0.42624	-0.1653	ppb	0.42624 257.80%
Na 589.592 Radial†	631.1	169.56	ug/L	14.415	169.56	ppb	14.415 8.50%
Ni 231.604†	44.1	1.0630	ug/L	0.20221	1.0630	ppb	0.20221 19.02%
P 214.914†	4.9	2.3109	ug/L	1.26235	2.3109	ppb	1.26235 54.63%
Pb 220.353†	7.6	0.9345	ug/L	1.15145	0.9345	ppb	1.15145 123.21%
S 181.975 Axial†	32.8	43.978	ug/L	8.1736	43.978	ppb	8.1736 18.59%
Sb 206.836†	-2.1	-0.7273	ug/L	0.71318	-0.7273	ppb	0.71318 98.06%
Se 196.026†	6.2	4.2979	ug/L	3.23571	4.2979	ppb	3.23571 75.29%
Si 251.611†	39527.1	1195.8	ug/L	10.70	1195.8	ppb	10.70 0.89%
Sn 189.927†	1.2	0.2128	ug/L	0.40465	0.2128	ppb	0.40465 190.20%
Sr 421.552†	91.1	0.5827	ug/L	0.09099	0.5827	ppb	0.09099 15.61%
Ti 334.940†	4586.9	6.9443	ug/L	0.10446	6.9443	ppb	0.10446 1.50%
Tl 190.801†	1.1	0.3911	ug/L	1.13850	0.3911	ppb	1.13850 291.14%
U 409.014†	11.9	0.3179	ug/L	0.85053	0.3179	ppb	0.85053 267.57%
V 292.402†	98.5	0.6190	ug/L	0.22786	0.6190	ppb	0.22786 36.81%
Zn 213.857†	294.1	2.6268	ug/L	0.08131	2.6268	ppb	0.08131 3.10%
SiO2†	39384.5	2569.4	ug/L	5.00	2569.4	ppb	5.00 0.19%

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/18/2010 17:59:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5472.5	5472.5	103	%			18:00:55
1	Y RADIAL	5736.7	5736.7	101.6	%			18:00:55
1	Al 396.153Radial†	6495.0	6317.8	5031.7	ug/L	5031.7	ppb	18:00:55
1	Ca 317.933Radial†	3104.6	3001.5	4962.2	ug/L	4962.2	ppb	18:01:15
1	Fe 238.204 Radial†	607.6	578.6	5011.5	ug/L	5011.5	ppb	18:01:15
1	K 766.490 Radial†	26817.2	23429.6	4949.2	ug/L	4949.2	ppb	18:00:55
1	Mg 279.077 IEC†	161.2	154.3	5082.2	ug/L	5082.2	ppb	18:01:15
1	Na 589.592 Radial†	37334.6	37441.8	10060	ug/L	10060	ppb	18:00:55
1	Sr 421.552†	82135.2	79942.3	511.59	ug/L	511.59	ppb	18:00:55
1	Sc 361.383	946992.4	946992.4	100.30	%			18:02:13
1	Y 371.029	789478.9	789478.9	99.010	%			18:02:13
1	Ag 328.068†	114174.3	113420.3	501.80	ug/L	501.80	ppb	18:02:18
1	As 188.979†	1179.9	1196.0	490.66	ug/L	490.66	ppb	18:02:38
1	B 249.677†	22318.7	22779.2	491.99	ug/L	491.99	ppb	18:02:18
1	Ba 233.527†	68512.5	68287.2	500.50	ug/L	500.50	ppb	18:02:18
1	Be 313.107†	1416260.3	1416539.4	502.38	ug/L	502.38	ppb	18:02:13
1	Cd 226.502†	46565.2	46642.3	497.84	ug/L	497.84	ppb	18:02:18
1	Co 228.616†	25549.0	25545.7	498.55	ug/L	498.55	ppb	18:02:18
1	Cr 267.716†	45822.9	45605.3	499.59	ug/L	499.59	ppb	18:02:18
1	Cu 324.752†	177956.3	171255.6	499.10	ug/L	499.10	ppb	18:02:18
1	Mn 257.610†	476572.3	474686.0	502.69	ug/L	502.69	ppb	18:02:13
1	Mo 202.031†	7394.3	7353.3	494.28	ug/L	494.28	ppb	18:02:38
1	Ni 231.604†	20875.2	20712.0	499.42	ug/L	499.42	ppb	18:02:18
1	P 214.914†	4513.8	4265.7	2356.7	ug/L	2356.7	ppb	18:02:38
1	Pb 220.353†	4162.6	4203.9	495.79	ug/L	495.79	ppb	18:02:38
1	S 181.975 Axial†	773.7	729.8	977.42	ug/L	977.42	ppb	18:02:38
1	Sb 206.836†	1528.1	1484.8	506.89	ug/L	506.89	ppb	18:02:38
1	Se 196.026†	775.4	806.0	514.07	ug/L	514.07	ppb	18:02:38
1	Si 251.611†	83713.1	82964.6	2503.8	ug/L	2503.8	ppb	18:02:18
1	Sn 189.927†	2953.7	2937.3	492.50	ug/L	492.50	ppb	18:02:38
1	Ti 334.940†	323712.8	324129.7	490.33	ug/L	490.33	ppb	18:02:18
1	Tl 190.801†	1653.6	1687.4	491.02	ug/L	491.02	ppb	18:02:38
1	U 409.014†	16014.1	17610.9	497.02	ug/L	497.02	ppb	18:02:18
1	V 292.402†	74533.2	75787.0	504.85	ug/L	504.85	ppb	18:02:18
1	Zn 213.857†	56328.3	55451.6	495.24	ug/L	495.24	ppb	18:02:18
1	SiO2†	82703.9	81930.7	5331.6	ug/L	5331.6	ppb	18:03:45
2	Sc Radial	5400.3	5400.3	101	%			18:01:20
2	Y RADIAL	5694.2	5694.2	100.9	%			18:01:20
2	Al 396.153Radial†	6418.0	6326.5	5037.7	ug/L	5037.7	ppb	18:01:20
2	Ca 317.933Radial†	3068.1	3005.9	4969.4	ug/L	4969.4	ppb	18:01:40
2	Fe 238.204 Radial†	598.2	577.3	4999.8	ug/L	4999.8	ppb	18:01:40
2	K 766.490 Radial†	26559.5	23524.3	4969.3	ug/L	4969.3	ppb	18:01:20
2	Mg 279.077 IEC†	158.3	153.5	5057.1	ug/L	5057.1	ppb	18:01:40
2	Na 589.592 Radial†	36638.7	37241.2	10006	ug/L	10006	ppb	18:01:20
2	Sr 421.552†	80750.6	79645.2	509.69	ug/L	509.69	ppb	18:01:20
2	Sc 361.383	924336.4	924336.4	97.901	%			18:02:43
2	Y 371.029	771731.3	771731.3	96.785	%			18:02:43
2	Ag 328.068†	111781.7	113766.5	503.33	ug/L	503.33	ppb	18:02:49
2	As 188.979†	1215.9	1261.5	517.30	ug/L	517.30	ppb	18:03:09
2	B 249.677†	21676.0	22668.2	489.57	ug/L	489.57	ppb	18:02:49
2	Ba 233.527†	67295.2	68718.0	503.66	ug/L	503.66	ppb	18:02:49
2	Be 313.107†	1384943.8	1419160.7	503.31	ug/L	503.31	ppb	18:02:43
2	Cd 226.502†	45802.3	47000.9	501.67	ug/L	501.67	ppb	18:02:49
2	Co 228.616†	25129.1	25741.2	502.40	ug/L	502.40	ppb	18:02:49
2	Cr 267.716†	45086.5	45972.9	503.62	ug/L	503.62	ppb	18:02:49
2	Cu 324.752†	173734.8	171292.3	499.21	ug/L	499.21	ppb	18:02:49
2	Mn 257.610†	465343.7	474862.7	502.88	ug/L	502.88	ppb	18:02:43
2	Mo 202.031†	7475.6	7617.0	511.99	ug/L	511.99	ppb	18:03:09
2	Ni 231.604†	20620.4	20961.9	505.45	ug/L	505.45	ppb	18:02:49

2	P 214.914†	4546.0	4408.9	2439.3 ug/L	2439.3 ppb	18:03:09
2	Pb 220.353†	4210.1	4354.1	513.49 ug/L	513.49 ppb	18:03:09
2	S 181.975 Axial†	776.8	752.0	1007.1 ug/L	1007.1 ppb	18:03:09
2	Sb 206.836†	1535.9	1530.1	522.44 ug/L	522.44 ppb	18:03:09
2	Se 196.026†	778.7	828.3	527.77 ug/L	527.77 ppb	18:03:09
2	Si 251.611†	81840.8	83098.0	2507.6 ug/L	2507.6 ppb	18:02:49
2	Sn 189.927†	2980.9	3037.4	509.25 ug/L	509.25 ppb	18:03:09
2	Ti 334.940†	317528.7	325723.7	492.74 ug/L	492.74 ppb	18:02:49
2	Tl 190.801†	1680.0	1754.8	510.50 ug/L	510.50 ppb	18:03:09
2	U 409.014†	15721.2	17703.1	499.63 ug/L	499.63 ppb	18:02:49
2	V 292.402†	73322.1	76371.3	508.94 ug/L	508.94 ppb	18:02:49
2	Zn 213.857†	55331.1	55809.4	498.43 ug/L	498.43 ppb	18:02:49
2	SiO2†	84007.4	85283.1	5549.8 ug/L	5549.8 ppb	18:03:50
3	Sc Radial	5402.4	5402.4	101 %		18:01:45
3	Y RADIAL	5649.9	5649.9	100.1 %		18:01:45
3	Al 396.153Radial†	6385.8	6292.2	5010.9 ug/L	5010.9 ppb	18:01:45
3	Ca 317.933Radial†	3067.3	3004.0	4966.3 ug/L	4966.3 ppb	18:02:05
3	Fe 238.204 Radial†	599.6	578.4	5009.8 ug/L	5009.8 ppb	18:02:05
3	K 766.490 Radial†	26461.7	23417.6	4946.7 ug/L	4946.7 ppb	18:01:45
3	Mg 279.077 IEC†	158.9	154.0	5073.7 ug/L	5073.7 ppb	18:02:05
3	Na 589.592 Radial†	36524.7	37114.6	9972.2 ug/L	9972.2 ppb	18:01:45
3	Sr 421.552†	80413.1	79281.3	507.36 ug/L	507.36 ppb	18:01:45
3	Sc 361.383	938850.0	938850.0	99.439 %		18:03:14
3	Y 371.029	782076.2	782076.2	98.082 %		18:03:14
3	Ag 328.068†	114604.4	114840.1	508.06 ug/L	508.06 ppb	18:03:20
3	As 188.979†	1210.7	1237.1	507.45 ug/L	507.45 ppb	18:03:40
3	B 249.677†	22430.7	23084.8	498.60 ug/L	498.60 ppb	18:03:20
3	Ba 233.527†	68953.6	69323.2	508.09 ug/L	508.09 ppb	18:03:20
3	Be 313.107†	1402797.0	1415245.9	501.94 ug/L	501.94 ppb	18:03:14
3	Cd 226.502†	47072.7	47555.2	507.59 ug/L	507.59 ppb	18:03:20
3	Co 228.616†	25758.6	25977.4	506.97 ug/L	506.97 ppb	18:03:20
3	Cr 267.716†	46185.4	46366.1	507.92 ug/L	507.92 ppb	18:03:20
3	Cu 324.752†	178459.2	173300.0	505.05 ug/L	505.05 ppb	18:03:20
3	Mn 257.610†	473240.9	475456.6	503.50 ug/L	503.50 ppb	18:03:14
3	Mo 202.031†	7419.0	7442.1	500.24 ug/L	500.24 ppb	18:03:40
3	Ni 231.604†	21073.0	21091.4	508.57 ug/L	508.57 ppb	18:03:20
3	P 214.914†	4528.5	4319.5	2386.6 ug/L	2386.6 ppb	18:03:40
3	Pb 220.353†	4190.9	4268.3	503.37 ug/L	503.37 ppb	18:03:40
3	S 181.975 Axial†	783.4	746.3	999.51 ug/L	999.51 ppb	18:03:40
3	Sb 206.836†	1534.6	1504.5	513.60 ug/L	513.60 ppb	18:03:40
3	Se 196.026†	772.8	810.1	516.61 ug/L	516.61 ppb	18:03:40
3	Si 251.611†	84176.3	84154.3	2539.7 ug/L	2539.7 ppb	18:03:20
3	Sn 189.927†	2966.0	2975.2	498.85 ug/L	498.85 ppb	18:03:40
3	Ti 334.940†	325873.7	329101.9	497.85 ug/L	497.85 ppb	18:03:20
3	Tl 190.801†	1668.4	1716.5	499.46 ug/L	499.46 ppb	18:03:40
3	U 409.014†	16169.7	17905.8	505.36 ug/L	505.36 ppb	18:03:20
3	V 292.402†	74976.2	76876.9	512.10 ug/L	512.10 ppb	18:03:20
3	Zn 213.857†	56830.1	56443.2	504.11 ug/L	504.11 ppb	18:03:20
3	SiO2†	84390.7	84342.1	5488.7 ug/L	5488.7 ppb	18:03:55

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	936726.3	99.214	%	1.2155				1.23%
Sc Radial	5425.0	102	%	0.8				0.76%
Y 371.029	781095.5	97.959	%	1.1180				1.14%
Y RADIAL	5693.6	100.9	%	0.77				0.76%
Ag 328.068†	114009.0	504.40	ug/L	3.265	504.40	ppb	3.265	0.65%
QC value within limits for Ag 328.068 Recovery = 100.88%								
Al 396.153Radial†	6312.2	5026.7	ug/L	14.09	5026.7	ppb	14.09	0.28%
QC value within limits for Al 396.153Radial Recovery = 100.53%								
As 188.979†	1231.5	505.13	ug/L	13.469	505.13	ppb	13.469	2.67%
QC value within limits for As 188.979 Recovery = 101.03%								
B 249.677†	22844.0	493.39	ug/L	4.672	493.39	ppb	4.672	0.95%
QC value within limits for B 249.677 Recovery = 98.68%								
Ba 233.527†	68776.1	504.08	ug/L	3.813	504.08	ppb	3.813	0.76%
QC value within limits for Ba 233.527 Recovery = 100.82%								
Be 313.107†	1416982.0	502.55	ug/L	0.701	502.55	ppb	0.701	0.14%
QC value within limits for Be 313.107 Recovery = 100.51%								
Ca 317.933Radial†	3003.8	4966.0	ug/L	3.64	4966.0	ppb	3.64	0.07%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.32%
Cd 226.502†            47066.2      502.37 ug/L         4.914      502.37 ppb          4.914   0.98%
   QC value within limits for Cd 226.502  Recovery = 100.47%
Co 228.616†            25754.8      502.64 ug/L         4.216      502.64 ppb          4.216   0.84%
   QC value within limits for Co 228.616  Recovery = 100.53%
Cr 267.716†            45981.4      503.71 ug/L         4.166      503.71 ppb          4.166   0.83%
   QC value within limits for Cr 267.716  Recovery = 100.74%
Cu 324.752†           171949.3      501.12 ug/L         3.407      501.12 ppb          3.407   0.68%
   QC value within limits for Cu 324.752  Recovery = 100.22%
Fe 238.204 Radial†       578.1      5007.0 ug/L          6.32      5007.0 ppb           6.32   0.13%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.14%
K 766.490 Radial†      23457.2      4955.1 ug/L         12.36      4955.1 ppb          12.36   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 99.10%
Mg 279.077 IEC†          153.9      5071.0 ug/L         12.75      5071.0 ppb          12.75   0.25%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.42%
Mn 257.610†           475001.8      503.02 ug/L         0.427      503.02 ppb          0.427   0.08%
   QC value within limits for Mn 257.610  Recovery = 100.60%
Mo 202.031†             7470.8      502.17 ug/L         9.012      502.17 ppb          9.012   1.79%
   QC value within limits for Mo 202.031  Recovery = 100.43%
Na 589.592 Radial†     37265.9       10013 ug/L          44.3       10013 ppb           44.3   0.44%
   QC value within limits for Na 589.592 Radial  Recovery = 100.13%
Ni 231.604†            20921.8      504.48 ug/L         4.651      504.48 ppb          4.651   0.92%
   QC value within limits for Ni 231.604  Recovery = 100.90%
P 214.914†              4331.4      2394.2 ug/L         41.80      2394.2 ppb          41.80   1.75%
   QC value within limits for P 214.914  Recovery = 95.77%
Pb 220.353†             4275.4      504.22 ug/L         8.881      504.22 ppb          8.881   1.76%
   QC value within limits for Pb 220.353  Recovery = 100.84%
S 181.975 Axial†         742.7      994.68 ug/L        15.415      994.68 ppb         15.415   1.55%
   QC value within limits for S 181.975 Axial  Recovery = 99.47%
Sb 206.836†             1506.5      514.31 ug/L         7.798      514.31 ppb          7.798   1.52%
   QC value within limits for Sb 206.836  Recovery = 102.86%
Se 196.026†              814.8      519.49 ug/L         7.288      519.49 ppb          7.288   1.40%
   QC value within limits for Se 196.026  Recovery = 103.90%
Si 251.611†            83405.6      2517.0 ug/L         19.73      2517.0 ppb          19.73   0.78%
   QC value within limits for Si 251.611  Recovery = 100.68%
Sn 189.927†             2983.3      500.20 ug/L         8.456      500.20 ppb          8.456   1.69%
   QC value within limits for Sn 189.927  Recovery = 100.04%
Sr 421.552†            79622.9      509.55 ug/L         2.119      509.55 ppb          2.119   0.42%
   QC value within limits for Sr 421.552  Recovery = 101.91%
Ti 334.940†           326318.4      493.64 ug/L         3.839      493.64 ppb          3.839   0.78%
   QC value within limits for Ti 334.940  Recovery = 98.73%
Tl 190.801†             1719.6      500.33 ug/L         9.771      500.33 ppb          9.771   1.95%
   QC value within limits for Tl 190.801  Recovery = 100.07%
U 409.014†             17740.0      500.67 ug/L         4.264      500.67 ppb          4.264   0.85%
   QC value within limits for U 409.014  Recovery = 100.13%
V 292.402†             76345.1      508.63 ug/L         3.637      508.63 ppb          3.637   0.72%
   QC value within limits for V 292.402  Recovery = 101.73%
Zn 213.857†            55901.4      499.26 ug/L         4.492      499.26 ppb          4.492   0.90%
   QC value within limits for Zn 213.857  Recovery = 99.85%
SiO2†                  83852.0      5456.7 ug/L        112.58      5456.7 ppb         112.58   2.06%
   QC value within limits for SiO2  Recovery = 102.04%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/18/2010 18:06:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5314.7	5314.7	99.8	%			18:07:57
1	Y RADIAL	5681.3	5681.3	100.6	%			18:07:57
1	Al 396.153Radial†	-20.7	-25.3	-20.301	ug/L	-20.301	ppb	18:07:57
1	Ca 317.933Radial†	15.0	-5.6	-9.2087	ug/L	-9.2087	ppb	18:08:17
1	Fe 238.204 Radial†	11.1	-1.7	-14.710	ug/L	-14.710	ppb	18:08:17
1	K 766.490 Radial†	2686.0	16.8	3.5565	ug/L	3.5565	ppb	18:07:57
1	Mg 279.077 IEC†	2.5	-0.2	-5.3752	ug/L	-5.3752	ppb	18:08:17
1	Na 589.592 Radial†	-1185.2	-89.3	-23.989	ug/L	-23.989	ppb	18:07:57
1	Sr 421.552†	19.2	7.6	0.0485	ug/L	0.0485	ppb	18:07:57
1	Sc 361.383	888078.6	888078.6	94.061	%			18:09:14
1	Y 371.029	781161.9	781161.9	97.967	%			18:09:14
1	Ag 328.068†	423.7	39.2	0.1801	ug/L	0.1801	ppb	18:09:14
1	As 188.979†	-26.7	-8.8	-3.5882	ug/L	-3.5882	ppb	18:09:34
1	B 249.677†	-398.9	103.4	2.2473	ug/L	2.2473	ppb	18:09:34
1	Ba 233.527†	7.2	-12.1	-0.0891	ug/L	-0.0891	ppb	18:09:34
1	Be 313.107†	-4334.2	-77.1	-0.0276	ug/L	-0.0276	ppb	18:09:14
1	Cd 226.502†	-205.4	-1.5	-0.0168	ug/L	-0.0168	ppb	18:09:34
1	Co 228.616†	-78.4	-9.9	-0.1924	ug/L	-0.1924	ppb	18:09:34
1	Cr 267.716†	117.5	44.8	0.4963	ug/L	0.4963	ppb	18:09:34
1	Cu 324.752†	6030.5	244.7	0.7212	ug/L	0.7212	ppb	18:09:14
1	Mn 257.610†	451.2	24.1	0.0242	ug/L	0.0242	ppb	18:09:34
1	Mo 202.031†	24.2	7.0	0.4664	ug/L	0.4664	ppb	18:09:34
1	Ni 231.604†	112.7	19.3	0.4661	ug/L	0.4661	ppb	18:09:34
1	P 214.914†	233.9	14.1	7.9683	ug/L	7.9683	ppb	18:09:34
1	Pb 220.353†	-66.6	-17.1	-2.0114	ug/L	-2.0114	ppb	18:09:34
1	S 181.975 Axial†	43.1	4.3	5.7317	ug/L	5.7317	ppb	18:09:34
1	Sb 206.836†	34.2	-2.4	-0.7507	ug/L	-0.7507	ppb	18:09:34
1	Se 196.026†	-20.6	11.0	6.7075	ug/L	6.7075	ppb	18:09:34
1	Si 251.611†	526.2	62.3	1.8779	ug/L	1.8779	ppb	18:09:34
1	Sn 189.927†	13.6	7.0	1.1631	ug/L	1.1631	ppb	18:09:34
1	Ti 334.940†	-1386.8	-85.6	-0.1236	ug/L	-0.1236	ppb	18:09:14
1	Tl 190.801†	-45.5	-9.6	-2.7853	ug/L	-2.7853	ppb	18:09:34
1	U 409.014†	-2071.0	-556.9	-15.769	ug/L	-15.769	ppb	18:09:14
1	V 292.402†	-1408.0	-19.3	-0.1488	ug/L	-0.1488	ppb	18:09:14
1	Zn 213.857†	742.4	81.6	0.7327	ug/L	0.7327	ppb	18:09:34
1	SiO2†	520.5	28.4	1.8413	ug/L	1.8413	ppb	18:10:30
2	Sc Radial	5438.6	5438.6	102	%			18:08:22
2	Y RADIAL	5755.1	5755.1	102.0	%			18:08:22
2	Al 396.153Radial†	6.3	1.5	1.1800	ug/L	1.1800	ppb	18:08:22
2	Ca 317.933Radial†	18.5	-2.4	-4.0275	ug/L	-4.0275	ppb	18:08:42
2	Fe 238.204 Radial†	12.4	-0.7	-6.1460	ug/L	-6.1460	ppb	18:08:42
2	K 766.490 Radial†	2892.1	157.3	33.283	ug/L	33.283	ppb	18:08:22
2	Mg 279.077 IEC†	-2.6	-5.1	-169.61	ug/L	-169.61	ppb	18:08:42
2	Na 589.592 Radial†	-1148.5	-26.3	-7.0590	ug/L	-7.0590	ppb	18:08:22
2	Sr 421.552†	40.4	27.9	0.1784	ug/L	0.1784	ppb	18:08:22
2	Sc 361.383	890577.0	890577.0	94.326	%			18:09:39
2	Y 371.029	784621.5	784621.5	98.401	%			18:09:39
2	Ag 328.068†	427.0	41.4	0.1892	ug/L	0.1892	ppb	18:09:39
2	As 188.979†	-25.9	-7.9	-3.2000	ug/L	-3.2000	ppb	18:09:59
2	B 249.677†	-438.7	62.4	1.3543	ug/L	1.3543	ppb	18:09:59
2	Ba 233.527†	2.8	-16.7	-0.1226	ug/L	-0.1226	ppb	18:09:59
2	Be 313.107†	-4322.4	-51.6	-0.0183	ug/L	-0.0183	ppb	18:09:39
2	Cd 226.502†	-187.9	17.7	0.1871	ug/L	0.1871	ppb	18:09:59
2	Co 228.616†	-74.5	-5.5	-0.1064	ug/L	-0.1064	ppb	18:09:59
2	Cr 267.716†	88.5	13.7	0.1547	ug/L	0.1547	ppb	18:09:59
2	Cu 324.752†	6058.6	256.6	0.7538	ug/L	0.7538	ppb	18:09:39
2	Mn 257.610†	445.8	17.0	0.0244	ug/L	0.0244	ppb	18:09:59
2	Mo 202.031†	29.0	11.9	0.7999	ug/L	0.7999	ppb	18:09:59
2	Ni 231.604†	102.0	7.6	0.1834	ug/L	0.1834	ppb	18:09:59

2	P 214.914†	223.5	2.4	1.2483	ug/L	1.2483 ppb	18:09:59
2	Pb 220.353†	-50.9	-0.2	-0.0195	ug/L	-0.0195 ppb	18:09:59
2	S 181.975 Axial†	36.1	-3.3	-4.3952	ug/L	-4.3952 ppb	18:09:59
2	Sb 206.836†	45.8	9.9	3.3032	ug/L	3.3032 ppb	18:09:59
2	Se 196.026†	-25.2	6.1	3.7509	ug/L	3.7509 ppb	18:09:59
2	Si 251.611†	549.1	85.0	2.5627	ug/L	2.5627 ppb	18:09:59
2	Sn 189.927†	17.9	11.5	1.9247	ug/L	1.9247 ppb	18:09:59
2	Ti 334.940†	-1309.6	0.5	0.0191	ug/L	0.0191 ppb	18:09:39
2	Tl 190.801†	-40.0	-3.7	-1.0573	ug/L	-1.0573 ppb	18:09:59
2	U 409.014†	-1938.5	-410.2	-11.617	ug/L	-11.617 ppb	18:09:39
2	V 292.402†	-1413.4	-20.8	-0.1503	ug/L	-0.1503 ppb	18:09:39
2	Zn 213.857†	726.6	62.6	0.5626	ug/L	0.5626 ppb	18:09:59
2	SiO2†	530.0	36.9	2.3873	ug/L	2.3873 ppb	18:10:35
3	Sc Radial	5483.7	5483.7	103	%		18:08:47
3	Y RADIAL	5831.6	5831.6	103.3	%		18:08:47
3	Al 396.153Radial†	-26.0	-29.9	-23.922	ug/L	-23.922 ppb	18:08:47
3	Ca 317.933Radial†	23.9	2.6	4.3619	ug/L	4.3619 ppb	18:09:07
3	Fe 238.204 Radial†	12.6	-0.6	-5.2637	ug/L	-5.2637 ppb	18:09:07
3	K 766.490 Radial†	2840.6	84.1	17.790	ug/L	17.790 ppb	18:08:47
3	Mg 279.077 IEC†	4.6	1.8	59.911	ug/L	59.911 ppb	18:09:07
3	Na 589.592 Radial†	-1216.2	-82.7	-22.233	ug/L	-22.233 ppb	18:08:47
3	Sr 421.552†	13.2	1.2	0.0076	ug/L	0.0076 ppb	18:08:47
3	Sc 361.383	896154.0	896154.0	94.917	%		18:10:04
3	Y 371.029	790818.6	790818.6	99.178	%		18:10:04
3	Ag 328.068†	295.6	-99.8	-0.4334	ug/L	-0.4334 ppb	18:10:04
3	As 188.979†	-23.2	-4.9	-1.9797	ug/L	-1.9797 ppb	18:10:24
3	B 249.677†	-419.3	85.7	1.8617	ug/L	1.8617 ppb	18:10:24
3	Ba 233.527†	13.0	-6.0	-0.0441	ug/L	-0.0441 ppb	18:10:24
3	Be 313.107†	-4458.1	-166.1	-0.0588	ug/L	-0.0588 ppb	18:10:04
3	Cd 226.502†	-218.4	-13.2	-0.1428	ug/L	-0.1428 ppb	18:10:24
3	Co 228.616†	-79.3	-10.1	-0.1967	ug/L	-0.1967 ppb	18:10:24
3	Cr 267.716†	85.2	9.7	0.1097	ug/L	0.1097 ppb	18:10:24
3	Cu 324.752†	6123.3	284.8	0.8346	ug/L	0.8346 ppb	18:10:04
3	Mn 257.610†	458.0	27.0	0.0256	ug/L	0.0256 ppb	18:10:24
3	Mo 202.031†	21.8	4.1	0.2780	ug/L	0.2780 ppb	18:10:24
3	Ni 231.604†	85.7	-10.3	-0.2481	ug/L	-0.2481 ppb	18:10:24
3	P 214.914†	223.5	0.9	0.3420	ug/L	0.3420 ppb	18:10:24
3	Pb 220.353†	-40.9	10.6	1.2470	ug/L	1.2470 ppb	18:10:24
3	S 181.975 Axial†	34.0	-5.7	-7.6040	ug/L	-7.6040 ppb	18:10:24
3	Sb 206.836†	41.1	4.6	1.5353	ug/L	1.5353 ppb	18:10:24
3	Se 196.026†	-22.5	9.2	5.6084	ug/L	5.6084 ppb	18:10:24
3	Si 251.611†	536.5	68.0	2.0552	ug/L	2.0552 ppb	18:10:24
3	Sn 189.927†	8.9	1.9	0.3260	ug/L	0.3260 ppb	18:10:24
3	Ti 334.940†	-1322.0	-4.0	-0.0066	ug/L	-0.0066 ppb	18:10:04
3	Tl 190.801†	-31.5	5.6	1.6118	ug/L	1.6118 ppb	18:10:24
3	U 409.014†	-1853.8	-308.2	-8.7276	ug/L	-8.7276 ppb	18:10:04
3	V 292.402†	-1401.1	1.4	-0.0019	ug/L	-0.0019 ppb	18:10:04
3	Zn 213.857†	727.0	58.2	0.5255	ug/L	0.5255 ppb	18:10:24
3	SiO2†	515.2	17.9	1.1583	ug/L	1.1583 ppb	18:10:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	891603.2	94.435	%	0.4379				0.46%
Sc Radial	5412.3	102	%	1.6				1.62%
Y 371.029	785534.0	98.516	%	0.6136				0.62%
Y RADIAL	5756.0	102.0	%	1.33				1.31%
Ag 328.068†	-6.4	-0.0214	ug/L	0.35684	-0.0214	ppb	0.35684	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-17.9	-14.348	ug/L	13.5686	-14.348	ppb	13.5686	94.57%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-7.2	-2.9227	ug/L	0.83935	-2.9227	ppb	0.83935	28.72%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	83.8	1.8211	ug/L	0.44786	1.8211	ppb	0.44786	24.59%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-11.6	-0.0853	ug/L	0.03936	-0.0853	ppb	0.03936	46.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-98.3	-0.0349	ug/L	0.02122	-0.0349	ppb	0.02122	60.84%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.8	-2.9581	ug/L	6.84824	-2.9581	ppb	6.84824	231.51%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 1.0      0.0092 ug/L       0.16647      0.0092 ppb        0.16647 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -8.5     -0.1652 ug/L       0.05092     -0.1652 ppb        0.05092  30.82%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                22.8      0.2536 ug/L       0.21140      0.2536 ppb        0.21140  83.37%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               262.0      0.7699 ug/L       0.05840      0.7699 ppb        0.05840   7.59%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.0     -8.7066 ug/L       5.21793     -8.7066 ppb        5.21793  59.93%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          86.1      18.210 ug/L       14.8679      18.210 ppb        14.8679  81.65%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.2     -38.359 ug/L      118.2632     -38.359 ppb       118.2632 308.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                22.7      0.0247 ug/L       0.00073      0.0247 ppb        0.00073   2.96%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 7.7      0.5148 ug/L       0.26432      0.5148 ppb        0.26432  51.35%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -66.1     -17.760 ug/L        9.3091     -17.760 ppb         9.3091  52.42%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.5      0.1338 ug/L       0.35969      0.1338 ppb        0.35969 268.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  5.8      3.1862 ug/L       4.16612      3.1862 ppb        4.16612 130.76%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.2     -0.2613 ug/L       1.64256     -0.2613 ppb        1.64256 628.58%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.6     -2.0891 ug/L       6.96052     -2.0891 ppb        6.96052 333.18%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.1      1.3626 ug/L       2.03245      1.3626 ppb        2.03245 149.16%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 8.8      5.3556 ug/L       1.49440      5.3556 ppb        1.49440  27.90%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                71.8      2.1652 ug/L       0.35542      2.1652 ppb        0.35542  16.41%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.8      1.1380 ug/L       0.79965      1.1380 ppb        0.79965  70.27%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                12.2      0.0781 ug/L       0.08917      0.0781 ppb        0.08917 114.11%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -29.7     -0.0370 ug/L       0.07603     -0.0370 ppb        0.07603 205.27%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.6     -0.7436 ug/L       2.21527     -0.7436 ppb        2.21527 297.91%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -425.1     -12.038 ug/L        3.5396     -12.038 ppb         3.5396  29.40%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -12.9     -0.1003 ug/L       0.08522     -0.1003 ppb        0.08522  84.93%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                67.5      0.6069 ug/L       0.11051      0.6069 ppb        0.11051  18.21%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      27.7      1.7957 ug/L       0.61576      1.7957 ppb        0.61576  34.29%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: 1202011711|940084|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 1/18/2010 18:12:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011711|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5466.0	5466.0	103	%			18:14:43
1	Y RADIAL	5714.0	5714.0	101.2	%			18:14:43
1	Al 396.153Radial†	6953.7	6772.5	5395.5	ug/L	5395.5	ppb	18:14:43
1	Ca 317.933Radial†	3160.3	3059.5	5057.9	ug/L	5057.9	ppb	18:15:03
1	Fe 238.204 Radial†	633.5	604.5	5234.7	ug/L	5234.7	ppb	18:15:03
1	K 766.490 Radial†	27604.5	24227.8	5120.0	ug/L	5120.0	ppb	18:14:43
1	Mg 279.077 IEC†	165.2	158.4	5216.3	ug/L	5216.3	ppb	18:15:03
1	Na 589.592 Radial†	18307.4	18941.0	5089.2	ug/L	5089.2	ppb	18:14:43
1	Sr 421.552†	80967.3	78898.9	504.92	ug/L	504.92	ppb	18:14:43
1	Sc 361.383	958341.7	958341.7	101.50	%			18:16:02
1	Y 371.029	797800.5	797800.5	100.05	%			18:16:02
1	Ag 328.068†	113500.9	111408.9	493.05	ug/L	493.05	ppb	18:16:02
1	As 188.979†	1229.3	1230.7	505.02	ug/L	505.02	ppb	18:16:22
1	B 249.677†	23187.4	23371.5	504.84	ug/L	504.84	ppb	18:16:02
1	Ba 233.527†	71145.5	70072.2	513.57	ug/L	513.57	ppb	18:16:02
1	Be 313.107†	1435852.3	1419119.2	503.34	ug/L	503.34	ppb	18:16:02
1	Cd 226.502†	45502.8	45045.8	480.77	ug/L	480.77	ppb	18:16:22
1	Co 228.616†	25188.2	24888.6	485.68	ug/L	485.68	ppb	18:16:22
1	Cr 267.716†	46679.6	45908.2	502.92	ug/L	502.92	ppb	18:16:02
1	Cu 324.752†	184730.9	175828.7	512.44	ug/L	512.44	ppb	18:16:02
1	Mn 257.610†	490453.2	482734.3	511.22	ug/L	511.22	ppb	18:16:02
1	Mo 202.031†	7451.0	7321.9	492.19	ug/L	492.19	ppb	18:16:22
1	Ni 231.604†	21095.4	20682.5	498.72	ug/L	498.72	ppb	18:16:22
1	P 214.914†	1237.8	984.9	466.78	ug/L	466.78	ppb	18:16:22
1	Pb 220.353†	4290.5	4280.7	504.87	ug/L	504.87	ppb	18:16:22
1	S 181.975 Axial†	3847.7	3749.2	5024.9	ug/L	5024.9	ppb	18:16:22
1	Sb 206.836†	1590.2	1527.9	521.30	ug/L	521.30	ppb	18:16:22
1	Se 196.026†	756.8	778.5	498.04	ug/L	498.04	ppb	18:16:22
1	Si 251.611†	217606.9	213887.2	6464.5	ug/L	6464.5	ppb	18:16:02
1	Sn 189.927†	3118.5	3064.8	513.86	ug/L	513.86	ppb	18:16:22
1	Ti 334.940†	342322.5	338641.7	512.29	ug/L	512.29	ppb	18:16:02
1	Tl 190.801†	1631.2	1645.8	479.26	ug/L	479.26	ppb	18:16:22
1	U 409.014†	16380.7	17783.1	501.86	ug/L	501.86	ppb	18:16:02
1	V 292.402†	76342.3	76689.3	510.70	ug/L	510.70	ppb	18:16:02
1	Zn 213.857†	56414.1	54871.0	489.98	ug/L	489.98	ppb	18:16:02
1	SiO2†	218512.9	214751.9	13997	ug/L	13997	ppb	18:17:22
2	Sc Radial	5476.1	5476.1	103	%			18:15:08
2	Y RADIAL	5770.3	5770.3	102.2	%			18:15:08
2	Al 396.153Radial†	7065.8	6868.9	5472.4	ug/L	5472.4	ppb	18:15:08
2	Ca 317.933Radial†	3166.6	3059.9	5058.7	ug/L	5058.7	ppb	18:15:28
2	Fe 238.204 Radial†	630.1	600.2	5197.0	ug/L	5197.0	ppb	18:15:28
2	K 766.490 Radial†	27991.2	24554.2	5189.0	ug/L	5189.0	ppb	18:15:08
2	Mg 279.077 IEC†	162.7	155.6	5125.8	ug/L	5125.8	ppb	18:15:28
2	Na 589.592 Radial†	18573.9	19167.2	5150.0	ug/L	5150.0	ppb	18:15:08
2	Sr 421.552†	82173.5	79926.1	511.49	ug/L	511.49	ppb	18:15:08
2	Sc 361.383	953922.2	953922.2	101.04	%			18:16:29
2	Y 371.029	795674.5	795674.5	99.787	%			18:16:29
2	Ag 328.068†	112861.1	111293.7	492.52	ug/L	492.52	ppb	18:16:29
2	As 188.979†	1237.6	1244.5	510.62	ug/L	510.62	ppb	18:16:49
2	B 249.677†	23107.1	23397.8	505.41	ug/L	505.41	ppb	18:16:29
2	Ba 233.527†	70709.4	69965.3	512.78	ug/L	512.78	ppb	18:16:29
2	Be 313.107†	1429113.9	1419003.6	503.30	ug/L	503.30	ppb	18:16:29
2	Cd 226.502†	45690.0	45438.8	484.98	ug/L	484.98	ppb	18:16:49
2	Co 228.616†	25293.5	25107.8	489.97	ug/L	489.97	ppb	18:16:49
2	Cr 267.716†	46281.5	45727.3	500.94	ug/L	500.94	ppb	18:16:29
2	Cu 324.752†	184043.8	175991.9	512.91	ug/L	512.91	ppb	18:16:29
2	Mn 257.610†	487393.8	481945.0	510.39	ug/L	510.39	ppb	18:16:29
2	Mo 202.031†	7494.9	7399.4	497.39	ug/L	497.39	ppb	18:16:49
2	Ni 231.604†	21165.0	20847.6	502.70	ug/L	502.70	ppb	18:16:49

2	P 214.914†	1237.4	990.2	469.82 ug/L	469.82 ppb	18:16:49
2	Pb 220.353†	4296.6	4306.3	507.91 ug/L	507.91 ppb	18:16:49
2	S 181.975 Axial†	3874.8	3793.6	5084.3 ug/L	5084.3 ppb	18:16:49
2	Sb 206.836†	1601.6	1546.5	527.61 ug/L	527.61 ppb	18:16:49
2	Se 196.026†	773.6	798.5	510.23 ug/L	510.23 ppb	18:16:49
2	Si 251.611†	216267.2	213554.4	6454.3 ug/L	6454.3 ppb	18:16:29
2	Sn 189.927†	3139.0	3099.3	519.64 ug/L	519.64 ppb	18:16:49
2	Ti 334.940†	340396.6	338298.1	511.77 ug/L	511.77 ppb	18:16:29
2	Tl 190.801†	1631.8	1653.8	481.56 ug/L	481.56 ppb	18:16:49
2	U 409.014†	16460.3	17936.6	506.22 ug/L	506.22 ppb	18:16:29
2	V 292.402†	75838.0	76538.6	509.80 ug/L	509.80 ppb	18:16:29
2	Zn 213.857†	56110.9	54828.4	489.57 ug/L	489.57 ppb	18:16:29
2	SiO2†	218326.6	215565.0	14050 ug/L	14050 ppb	18:17:27
3	Sc Radial	5542.9	5542.9	104 %		18:15:33
3	Y RADIAL	5828.3	5828.3	103.2 %		18:15:33
3	Al 396.153Radial†	7136.3	6853.8	5460.6 ug/L	5460.6 ppb	18:15:33
3	Ca 317.933Radial†	3194.0	3049.1	5040.8 ug/L	5040.8 ppb	18:15:53
3	Fe 238.204 Radial†	634.0	596.5	5165.2 ug/L	5165.2 ppb	18:15:53
3	K 766.490 Radial†	28115.8	24345.8	5144.9 ug/L	5144.9 ppb	18:15:33
3	Mg 279.077 IEC†	161.8	152.8	5034.1 ug/L	5034.1 ppb	18:15:53
3	Na 589.592 Radial†	18744.5	19113.5	5135.5 ug/L	5135.5 ppb	18:15:33
3	Sr 421.552†	82754.8	79521.7	508.90 ug/L	508.90 ppb	18:15:33
3	Sc 361.383	955818.1	955818.1	101.24 %		18:16:56
3	Y 371.029	796107.2	796107.2	99.842 %		18:16:56
3	Ag 328.068†	113334.8	111540.0	493.60 ug/L	493.60 ppb	18:16:56
3	As 188.979†	1232.4	1236.9	507.54 ug/L	507.54 ppb	18:17:16
3	B 249.677†	23224.6	23468.5	506.96 ug/L	506.96 ppb	18:16:56
3	Ba 233.527†	70956.4	70070.4	513.55 ug/L	513.55 ppb	18:16:56
3	Be 313.107†	1431696.5	1418749.1	503.21 ug/L	503.21 ppb	18:16:56
3	Cd 226.502†	45343.6	45006.9	480.37 ug/L	480.37 ppb	18:17:16
3	Co 228.616†	25129.9	24896.5	485.84 ug/L	485.84 ppb	18:17:16
3	Cr 267.716†	46476.6	45829.2	502.05 ug/L	502.05 ppb	18:16:56
3	Cu 324.752†	184566.1	176146.5	513.36 ug/L	513.36 ppb	18:16:56
3	Mn 257.610†	489232.4	482804.2	511.30 ug/L	511.30 ppb	18:16:56
3	Mo 202.031†	7436.9	7327.3	492.55 ug/L	492.55 ppb	18:17:16
3	Ni 231.604†	21024.8	20667.6	498.36 ug/L	498.36 ppb	18:17:16
3	P 214.914†	1225.3	975.8	461.40 ug/L	461.40 ppb	18:17:16
3	Pb 220.353†	4244.5	4246.4	500.86 ug/L	500.86 ppb	18:17:16
3	S 181.975 Axial†	3833.5	3745.2	5019.5 ug/L	5019.5 ppb	18:17:16
3	Sb 206.836†	1595.3	1537.1	524.30 ug/L	524.30 ppb	18:17:16
3	Se 196.026†	764.3	787.8	503.54 ug/L	503.54 ppb	18:17:16
3	Si 251.611†	217135.8	213987.8	6467.5 ug/L	6467.5 ppb	18:16:56
3	Sn 189.927†	3101.0	3055.7	512.33 ug/L	512.33 ppb	18:17:16
3	Ti 334.940†	341518.4	338737.9	512.45 ug/L	512.45 ppb	18:16:56
3	Tl 190.801†	1634.9	1653.7	481.55 ug/L	481.55 ppb	18:17:16
3	U 409.014†	16212.3	17659.3	498.37 ug/L	498.37 ppb	18:16:56
3	V 292.402†	75957.5	76507.8	509.52 ug/L	509.52 ppb	18:16:56
3	Zn 213.857†	56333.1	54937.7	490.58 ug/L	490.58 ppb	18:16:56
3	SiO2†	217336.4	214158.2	13958 ug/L	13958 ppb	18:17:32

Mean Data: 1202011711|940084|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	956027.4	101.26	%	0.235				0.23%
Sc Radial	5495.0	103	%	0.8				0.76%
Y 371.029	796527.4	99.894	%	0.1409				0.14%
Y RADIAL	5770.8	102.2	%	1.01				0.99%
Ag 328.068†	111414.2	493.06	ug/L	0.539	493.06	ppb	0.539	0.11%
Al 396.153Radial†	6831.7	5442.9	ug/L	41.41	5442.9	ppb	41.41	0.76%
As 188.979†	1237.4	507.72	ug/L	2.803	507.72	ppb	2.803	0.55%
B 249.677†	23412.6	505.74	ug/L	1.095	505.74	ppb	1.095	0.22%
Ba 233.527†	70036.0	513.30	ug/L	0.448	513.30	ppb	0.448	0.09%
Be 313.107†	1418957.3	503.29	ug/L	0.067	503.29	ppb	0.067	0.01%
Ca 317.933Radial†	3056.1	5052.5	ug/L	10.13	5052.5	ppb	10.13	0.20%
Cd 226.502†	45163.9	482.04	ug/L	2.553	482.04	ppb	2.553	0.53%
Co 228.616†	24964.3	487.16	ug/L	2.434	487.16	ppb	2.434	0.50%
Cr 267.716†	45821.6	501.97	ug/L	0.994	501.97	ppb	0.994	0.20%
Cu 324.752†	175989.0	512.90	ug/L	0.462	512.90	ppb	0.462	0.09%
Fe 238.204 Radial†	600.4	5199.0	ug/L	34.79	5199.0	ppb	34.79	0.67%
K 766.490 Radial†	24375.9	5151.3	ug/L	34.94	5151.3	ppb	34.94	0.68%

Mg 279.077 IEC†	155.6	5125.4 ug/L	91.13	5125.4 ppb	91.13	1.78%
Mn 257.610†	482494.5	510.97 ug/L	0.505	510.97 ppb	0.505	0.10%
Mo 202.031†	7349.5	494.04 ug/L	2.904	494.04 ppb	2.904	0.59%
Na 589.592 Radial†	19073.9	5124.9 ug/L	31.75	5124.9 ppb	31.75	0.62%
Ni 231.604†	20732.5	499.93 ug/L	2.409	499.93 ppb	2.409	0.48%
P 214.914†	983.6	466.00 ug/L	4.261	466.00 ppb	4.261	0.91%
Pb 220.353†	4277.8	504.55 ug/L	3.534	504.55 ppb	3.534	0.70%
S 181.975 Axial†	3762.6	5042.9 ug/L	36.00	5042.9 ppb	36.00	0.71%
Sb 206.836†	1537.2	524.41 ug/L	3.158	524.41 ppb	3.158	0.60%
Se 196.026†	788.3	503.94 ug/L	6.105	503.94 ppb	6.105	1.21%
Si 251.611†	213809.8	6462.1 ug/L	6.90	6462.1 ppb	6.90	0.11%
Sn 189.927†	3073.3	515.28 ug/L	3.853	515.28 ppb	3.853	0.75%
Sr 421.552†	79448.9	508.44 ug/L	3.312	508.44 ppb	3.312	0.65%
Ti 334.940†	338559.2	512.17 ug/L	0.352	512.17 ppb	0.352	0.07%
Tl 190.801†	1651.1	480.79 ug/L	1.322	480.79 ppb	1.322	0.27%
U 409.014†	17793.0	502.15 ug/L	3.933	502.15 ppb	3.933	0.78%
V 292.402†	76578.6	510.01 ug/L	0.620	510.01 ppb	0.620	0.12%
Zn 213.857†	54879.0	490.04 ug/L	0.511	490.04 ppb	0.511	0.10%
SiO2†	214825.0	14001 ug/L	46.0	14001 ppb	46.0	0.33%

Sequence No.: 16
Sample ID: 1202011712|940084|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 1/18/2010 18:19:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011712|940084|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5462.9	5462.9	103	%			18:21:37
1	Y RADIAL	5776.2	5776.2	102.3	%			18:21:37
1	Al 396.153Radial†	73.4	66.9	53.492	ug/L	53.492	ppb	18:21:37
1	Ca 317.933Radial†	27.8	6.6	10.845	ug/L	10.845	ppb	18:21:57
1	Fe 238.204 Radial†	17.9	4.7	40.381	ug/L	40.381	ppb	18:21:57
1	K 766.490 Radial†	2982.9	233.3	49.344	ug/L	49.344	ppb	18:21:37
1	Mg 279.077 IEC†	-0.0	-2.7	-87.788	ug/L	-87.788	ppb	18:21:57
1	Na 589.592 Radial†	-1132.1	-5.3	-1.4289	ug/L	-1.4289	ppb	18:21:37
1	Sr 421.552†	47.8	34.9	0.2233	ug/L	0.2233	ppb	18:21:37
1	Sc 361.383	954373.7	954373.7	101.08	%			18:22:53
1	Y 371.029	805081.1	805081.1	100.97	%			18:22:53
1	Ag 328.068†	388.8	-26.6	-0.0971	ug/L	-0.0971	ppb	18:22:59
1	As 188.979†	-27.9	-8.0	-3.2545	ug/L	-3.2545	ppb	18:23:19
1	B 249.677†	-267.9	262.5	5.6880	ug/L	5.6880	ppb	18:23:19
1	Ba 233.527†	108.0	87.1	0.6385	ug/L	0.6385	ppb	18:23:19
1	Be 313.107†	-4304.8	272.1	0.0994	ug/L	0.0994	ppb	18:22:59
1	Cd 226.502†	-223.9	-4.6	-0.0549	ug/L	-0.0549	ppb	18:23:19
1	Co 228.616†	-65.1	9.0	0.1744	ug/L	0.1744	ppb	18:23:19
1	Cr 267.716†	113.7	32.4	0.3584	ug/L	0.3584	ppb	18:23:19
1	Cu 324.752†	6222.6	-10.6	-0.0245	ug/L	-0.0245	ppb	18:22:59
1	Mn 257.610†	2156.4	1677.8	1.7833	ug/L	1.7833	ppb	18:22:59
1	Mo 202.031†	33.6	14.4	0.9735	ug/L	0.9735	ppb	18:23:19
1	Ni 231.604†	110.8	9.1	0.2190	ug/L	0.2190	ppb	18:23:19
1	P 214.914†	236.2	-0.9	-0.5239	ug/L	-0.5239	ppb	18:23:19
1	Pb 220.353†	-58.5	-4.1	-0.4727	ug/L	-0.4727	ppb	18:23:19
1	S 181.975 Axial†	56.0	13.9	18.635	ug/L	18.635	ppb	18:23:19
1	Sb 206.836†	40.1	1.0	0.3426	ug/L	0.3426	ppb	18:23:19
1	Se 196.026†	-19.7	13.5	8.4015	ug/L	8.4015	ppb	18:23:19
1	Si 251.611†	7931.6	7349.5	222.32	ug/L	222.32	ppb	18:22:59
1	Sn 189.927†	6.7	-0.9	-0.1481	ug/L	-0.1481	ppb	18:23:19
1	Ti 334.940†	-470.5	923.3	1.4089	ug/L	1.4089	ppb	18:22:59
1	Tl 190.801†	-35.0	4.1	1.2130	ug/L	1.2130	ppb	18:23:19
1	U 409.014†	-1926.3	-260.7	-7.3887	ug/L	-7.3887	ppb	18:22:53
1	V 292.402†	-1462.0	31.2	0.1956	ug/L	0.1956	ppb	18:22:59
1	Zn 213.857†	816.0	99.6	0.8919	ug/L	0.8919	ppb	18:23:19
1	SiO2†	7992.9	7382.3	481.58	ug/L	481.58	ppb	18:24:25
2	Sc Radial	5469.5	5469.5	103	%			18:22:02
2	Y RADIAL	5804.9	5804.9	102.8	%			18:22:02
2	Al 396.153Radial†	69.0	62.6	50.064	ug/L	50.064	ppb	18:22:02
2	Ca 317.933Radial†	30.5	9.1	15.001	ug/L	15.001	ppb	18:22:22
2	Fe 238.204 Radial†	16.4	3.1	27.177	ug/L	27.177	ppb	18:22:22
2	K 766.490 Radial†	2917.5	166.1	35.107	ug/L	35.107	ppb	18:22:02
2	Mg 279.077 IEC†	-0.1	-2.7	-89.488	ug/L	-89.488	ppb	18:22:22
2	Na 589.592 Radial†	-1008.9	116.1	31.192	ug/L	31.192	ppb	18:22:02
2	Sr 421.552†	47.2	34.3	0.2194	ug/L	0.2194	ppb	18:22:02
2	Sc 361.383	957489.0	957489.0	101.41	%			18:23:24
2	Y 371.029	806458.6	806458.6	101.14	%			18:23:24
2	Ag 328.068†	498.1	80.0	0.3633	ug/L	0.3633	ppb	18:23:29
2	As 188.979†	-19.1	0.7	0.3173	ug/L	0.3173	ppb	18:23:49
2	B 249.677†	-250.8	280.2	6.0739	ug/L	6.0739	ppb	18:23:49
2	Ba 233.527†	75.8	55.1	0.4040	ug/L	0.4040	ppb	18:23:49
2	Be 313.107†	-4354.4	237.1	0.0871	ug/L	0.0871	ppb	18:23:29
2	Cd 226.502†	-225.3	-5.3	-0.0600	ug/L	-0.0600	ppb	18:23:49
2	Co 228.616†	-60.1	14.1	0.2725	ug/L	0.2725	ppb	18:23:49
2	Cr 267.716†	105.5	24.0	0.2640	ug/L	0.2640	ppb	18:23:49
2	Cu 324.752†	6249.1	-4.4	-0.0101	ug/L	-0.0101	ppb	18:23:29
2	Mn 257.610†	2169.9	1684.1	1.7887	ug/L	1.7887	ppb	18:23:29
2	Mo 202.031†	22.2	3.1	0.2080	ug/L	0.2080	ppb	18:23:49
2	Ni 231.604†	123.8	21.5	0.5198	ug/L	0.5198	ppb	18:23:49

2	P 214.914†	232.6	-5.2	-3.0033 ug/L	-3.0033 ppb	18:23:49
2	Pb 220.353†	-47.0	7.4	0.8771 ug/L	0.8771 ppb	18:23:49
2	S 181.975 Axial†	48.4	6.2	8.3393 ug/L	8.3393 ppb	18:23:49
2	Sb 206.836†	32.5	-6.6	-2.2073 ug/L	-2.2073 ppb	18:23:49
2	Se 196.026†	-19.8	13.3	8.2801 ug/L	8.2801 ppb	18:23:49
2	Si 251.611†	8026.3	7417.4	224.39 ug/L	224.39 ppb	18:23:29
2	Sn 189.927†	-1.0	-8.5	-1.4230 ug/L	-1.4230 ppb	18:23:49
2	Ti 334.940†	-467.0	928.3	1.4150 ug/L	1.4150 ppb	18:23:29
2	Tl 190.801†	-26.3	12.8	3.7295 ug/L	3.7295 ppb	18:23:49
2	U 409.014†	-1752.6	-83.3	-2.3616 ug/L	-2.3616 ppb	18:23:24
2	V 292.402†	-1456.8	41.1	0.2611 ug/L	0.2611 ppb	18:23:29
2	Zn 213.857†	819.7	100.6	0.9004 ug/L	0.9004 ppb	18:23:49
2	SiO2†	7910.6	7275.4	474.63 ug/L	474.63 ppb	18:24:30
3	Sc Radial	5589.1	5589.1	105 %		18:22:27
3	Y RADIAL	5905.7	5905.7	104.6 %		18:22:27
3	Al 396.153Radial†	49.2	42.3	33.808 ug/L	33.808 ppb	18:22:27
3	Ca 317.933Radial†	30.9	8.9	14.671 ug/L	14.671 ppb	18:22:47
3	Fe 238.204 Radial†	16.7	3.1	26.442 ug/L	26.442 ppb	18:22:47
3	K 766.490 Radial†	2930.7	117.9	24.922 ug/L	24.922 ppb	18:22:27
3	Mg 279.077 IEC†	3.1	0.3	10.172 ug/L	10.172 ppb	18:22:47
3	Na 589.592 Radial†	-1035.6	111.7	30.004 ug/L	30.004 ppb	18:22:27
3	Sr 421.552†	46.9	33.0	0.2113 ug/L	0.2113 ppb	18:22:27
3	Sc 361.383	954865.7	954865.7	101.14 %		18:23:54
3	Y 371.029	803535.1	803535.1	100.77 %		18:23:54
3	Ag 328.068†	348.2	-66.9	-0.2816 ug/L	-0.2816 ppb	18:23:59
3	As 188.979†	-26.1	-6.3	-2.5286 ug/L	-2.5286 ppb	18:24:19
3	B 249.677†	-265.6	264.9	5.7428 ug/L	5.7428 ppb	18:24:19
3	Ba 233.527†	97.7	76.9	0.5641 ug/L	0.5641 ppb	18:24:19
3	Be 313.107†	-4484.7	96.4	0.0373 ug/L	0.0373 ppb	18:23:59
3	Cd 226.502†	-209.7	9.6	0.0988 ug/L	0.0988 ppb	18:24:19
3	Co 228.616†	-67.4	6.8	0.1302 ug/L	0.1302 ppb	18:24:19
3	Cr 267.716†	111.3	30.0	0.3304 ug/L	0.3304 ppb	18:24:19
3	Cu 324.752†	6335.4	97.8	0.2880 ug/L	0.2880 ppb	18:23:59
3	Mn 257.610†	2207.9	1727.5	1.8306 ug/L	1.8306 ppb	18:23:59
3	Mo 202.031†	26.5	7.4	0.5004 ug/L	0.5004 ppb	18:24:19
3	Ni 231.604†	101.1	-0.5	-0.0129 ug/L	-0.0129 ppb	18:24:19
3	P 214.914†	243.5	6.2	3.5200 ug/L	3.5200 ppb	18:24:19
3	Pb 220.353†	-48.1	6.1	0.7274 ug/L	0.7274 ppb	18:24:19
3	S 181.975 Axial†	44.8	2.8	3.7154 ug/L	3.7154 ppb	18:24:19
3	Sb 206.836†	30.3	-8.8	-2.8838 ug/L	-2.8838 ppb	18:24:19
3	Se 196.026†	-34.9	-1.6	-0.8906 ug/L	-0.8906 ppb	18:24:19
3	Si 251.611†	8123.2	7534.9	227.94 ug/L	227.94 ppb	18:23:59
3	Sn 189.927†	4.9	-2.6	-0.4366 ug/L	-0.4366 ppb	18:24:19
3	Ti 334.940†	-472.2	921.9	1.3972 ug/L	1.3972 ppb	18:23:59
3	Tl 190.801†	-23.8	15.2	4.4184 ug/L	4.4184 ppb	18:24:19
3	U 409.014†	-1755.6	-91.0	-2.5805 ug/L	-2.5805 ppb	18:23:54
3	V 292.402†	-1413.1	80.3	0.5247 ug/L	0.5247 ppb	18:23:59
3	Zn 213.857†	808.1	91.4	0.8203 ug/L	0.8203 ppb	18:24:19
3	SiO2†	7999.6	7384.9	481.76 ug/L	481.76 ppb	18:24:35

Mean Data: 1202011712|940084|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	955576.2	101.21	%	0.177				0.18%
Sc Radial	5507.2	103	%	1.3				1.29%
Y 371.029	805024.9	100.96	%	0.183				0.18%
Y RADIAL	5828.9	103.3	%	1.20				1.17%
Ag 328.068†	-4.5	-0.0051	ug/L	0.33217	-0.0051	ppb	0.33217	>999.9%
Al 396.153Radial†	57.3	45.788	ug/L	10.5158	45.788	ppb	10.5158	22.97%
As 188.979†	-4.5	-1.8219	ug/L	1.88788	-1.8219	ppb	1.88788	103.62%
B 249.677†	269.2	5.8349	ug/L	0.20880	5.8349	ppb	0.20880	3.58%
Ba 233.527†	73.0	0.5355	ug/L	0.11982	0.5355	ppb	0.11982	22.37%
Be 313.107†	201.8	0.0746	ug/L	0.03290	0.0746	ppb	0.03290	44.10%
Ca 317.933Radial†	8.2	13.506	ug/L	2.3098	13.506	ppb	2.3098	17.10%
Cd 226.502†	-0.1	-0.0054	ug/L	0.09023	-0.0054	ppb	0.09023	>999.9%
Co 228.616†	10.0	0.1924	ug/L	0.07281	0.1924	ppb	0.07281	37.84%
Cr 267.716†	28.8	0.3176	ug/L	0.04848	0.3176	ppb	0.04848	15.26%
Cu 324.752†	27.6	0.0845	ug/L	0.17640	0.0845	ppb	0.17640	208.84%
Fe 238.204 Radial†	3.6	31.334	ug/L	7.8443	31.334	ppb	7.8443	25.03%
K 766.490 Radial†	172.4	36.457	ug/L	12.2668	36.457	ppb	12.2668	33.65%

Mg 279.077 IEC†	-1.7	-55.701	ug/L	57.0547	-55.701	ppb	57.0547	102.43%
Mn 257.610†	1696.4	1.8009	ug/L	0.02586	1.8009	ppb	0.02586	1.44%
Mo 202.031†	8.3	0.5606	ug/L	0.38628	0.5606	ppb	0.38628	68.90%
Na 589.592 Radial†	74.1	19.922	ug/L	18.5000	19.922	ppb	18.5000	92.86%
Ni 231.604†	10.0	0.2420	ug/L	0.26705	0.2420	ppb	0.26705	110.36%
P 214.914†	0.1	-0.0024	ug/L	3.29277	-0.0024	ppb	3.29277	>999.9%
Pb 220.353†	3.1	0.3773	ug/L	0.73992	0.3773	ppb	0.73992	196.11%
S 181.975 Axial†	7.6	10.230	ug/L	7.6373	10.230	ppb	7.6373	74.66%
Sb 206.836†	-4.8	-1.5828	ug/L	1.70143	-1.5828	ppb	1.70143	107.49%
Se 196.026†	8.4	5.2637	ug/L	5.33009	5.2637	ppb	5.33009	101.26%
Si 251.611†	7433.9	224.88	ug/L	2.840	224.88	ppb	2.840	1.26%
Sn 189.927†	-4.0	-0.6692	ug/L	0.66855	-0.6692	ppb	0.66855	99.90%
Sr 421.552†	34.1	0.2180	ug/L	0.00613	0.2180	ppb	0.00613	2.81%
Ti 334.940†	924.5	1.4070	ug/L	0.00905	1.4070	ppb	0.00905	0.64%
Tl 190.801†	10.7	3.1203	ug/L	1.68731	3.1203	ppb	1.68731	54.08%
U 409.014†	-145.0	-4.1103	ug/L	2.84131	-4.1103	ppb	2.84131	69.13%
V 292.402†	50.9	0.3271	ug/L	0.17419	0.3271	ppb	0.17419	53.25%
Zn 213.857†	97.2	0.8709	ug/L	0.04399	0.8709	ppb	0.04399	5.05%
SiO2†	7347.5	479.33	ug/L	4.067	479.33	ppb	4.067	0.85%

Sequence No.: 22
Sample ID: 244226001|940084|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 1/18/2010 19:01:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244226001|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5627.0	5627.0	106	%			19:03:31
1	Y RADIAL	5923.1	5923.1	104.9	%			19:03:31
1	Al 396.153Radial†	1.0	-3.7	-2.9496	ug/L	-2.9496	ppb	19:03:31
1	Ca 317.933Radial†	28.9	6.8	11.163	ug/L	11.163	ppb	19:03:51
1	Fe 238.204 Radial†	11.5	-1.9	-16.811	ug/L	-16.811	ppb	19:03:51
1	K 766.490 Radial†	3344.9	491.2	103.86	ug/L	103.86	ppb	19:03:31
1	Mg 279.077 IEC†	2.3	-0.5	-16.030	ug/L	-16.030	ppb	19:03:51
1	Na 589.592 Radial†	-835.9	307.3	82.570	ug/L	82.570	ppb	19:03:31
1	Sr 421.552†	38.8	25.1	0.1602	ug/L	0.1602	ppb	19:03:31
1	Sc 361.383	970116.0	970116.0	102.75	%			19:04:48
1	Y 371.029	814599.3	814599.3	102.16	%			19:04:48
1	Ag 328.068†	415.9	-6.5	-0.0326	ug/L	-0.0326	ppb	19:04:53
1	As 188.979†	-25.8	-5.5	-2.2490	ug/L	-2.2490	ppb	19:05:13
1	B 249.677†	356.6	874.6	18.978	ug/L	18.978	ppb	19:04:53
1	Ba 233.527†	37.2	16.5	0.1212	ug/L	0.1212	ppb	19:05:13
1	Be 313.107†	-4523.5	128.3	0.0465	ug/L	0.0465	ppb	19:04:53
1	Cd 226.502†	-229.9	-6.9	-0.0716	ug/L	-0.0716	ppb	19:05:13
1	Co 228.616†	-69.2	6.1	0.1189	ug/L	0.1189	ppb	19:05:13
1	Cr 267.716†	103.5	20.7	0.2266	ug/L	0.2266	ppb	19:05:13
1	Cu 324.752†	6446.7	107.6	0.3125	ug/L	0.3125	ppb	19:04:53
1	Mn 257.610†	688.4	214.4	0.2259	ug/L	0.2259	ppb	19:05:13
1	Mo 202.031†	27.4	7.9	0.5263	ug/L	0.5263	ppb	19:05:13
1	Ni 231.604†	105.6	2.2	0.0538	ug/L	0.0538	ppb	19:05:13
1	P 214.914†	236.2	-4.7	-2.7703	ug/L	-2.7703	ppb	19:05:13
1	Pb 220.353†	-71.1	-15.4	-1.8107	ug/L	-1.8107	ppb	19:05:13
1	S 181.975 Axial†	73.6	30.1	40.336	ug/L	40.336	ppb	19:05:13
1	Sb 206.836†	41.1	1.3	0.4075	ug/L	0.4075	ppb	19:05:13
1	Se 196.026†	-22.9	10.6	6.4400	ug/L	6.4400	ppb	19:05:13
1	Si 251.611†	46058.4	44328.4	1341.0	ug/L	1341.0	ppb	19:04:53
1	Sn 189.927†	-0.6	-8.1	-1.3467	ug/L	-1.3467	ppb	19:05:13
1	Ti 334.940†	-1099.7	318.5	0.4844	ug/L	0.4844	ppb	19:04:53
1	Tl 190.801†	-42.6	-2.7	-0.7782	ug/L	-0.7782	ppb	19:05:13
1	U 409.014†	-1671.1	18.6	0.5279	ug/L	0.5279	ppb	19:04:48
1	V 292.402†	-1446.1	70.2	0.4712	ug/L	0.4712	ppb	19:04:53
1	Zn 213.857†	864.7	133.9	1.2069	ug/L	1.2069	ppb	19:05:13
1	SiO2†	46215.6	44453.6	2900.1	ug/L	2900.1	ppb	19:06:19
2	Sc Radial	5596.8	5596.8	105	%			19:03:56
2	Y RADIAL	5927.0	5927.0	105.0	%			19:03:56
2	Al 396.153Radial†	-11.7	-15.8	-12.594	ug/L	-12.594	ppb	19:03:56
2	Ca 317.933Radial†	27.5	5.6	9.2497	ug/L	9.2497	ppb	19:04:16
2	Fe 238.204 Radial†	12.2	-1.2	-10.438	ug/L	-10.438	ppb	19:04:16
2	K 766.490 Radial†	3381.8	543.4	114.90	ug/L	114.90	ppb	19:03:56
2	Mg 279.077 IEC†	1.1	-1.6	-52.554	ug/L	-52.554	ppb	19:04:16
2	Na 589.592 Radial†	-844.9	294.5	79.117	ug/L	79.117	ppb	19:03:56
2	Sr 421.552†	34.2	20.9	0.1336	ug/L	0.1336	ppb	19:03:56
2	Sc 361.383	954020.5	954020.5	101.05	%			19:05:18
2	Y 371.029	800960.0	800960.0	100.45	%			19:05:18
2	Ag 328.068†	397.7	-17.7	-0.0790	ug/L	-0.0790	ppb	19:05:23
2	As 188.979†	-29.6	-9.7	-3.9464	ug/L	-3.9464	ppb	19:05:43
2	B 249.677†	321.9	846.1	18.359	ug/L	18.359	ppb	19:05:23
2	Ba 233.527†	34.7	14.7	0.1068	ug/L	0.1068	ppb	19:05:43
2	Be 313.107†	-4581.4	-3.2	-0.0002	ug/L	-0.0002	ppb	19:05:23
2	Cd 226.502†	-226.6	-7.4	-0.0787	ug/L	-0.0787	ppb	19:05:43
2	Co 228.616†	-72.6	1.5	0.0277	ug/L	0.0277	ppb	19:05:43
2	Cr 267.716†	96.5	15.5	0.1701	ug/L	0.1701	ppb	19:05:43
2	Cu 324.752†	6467.9	234.5	0.6845	ug/L	0.6845	ppb	19:05:23
2	Mn 257.610†	678.0	215.4	0.2291	ug/L	0.2291	ppb	19:05:43
2	Mo 202.031†	12.9	-6.0	-0.4026	ug/L	-0.4026	ppb	19:05:43
2	Ni 231.604†	88.8	-12.7	-0.3059	ug/L	-0.3059	ppb	19:05:43

2	P 214.914†	256.9	19.7	11.167 ug/L	11.167 ppb	19:05:43
2	Pb 220.353†	-66.5	-12.1	-1.4268 ug/L	-1.4268 ppb	19:05:43
2	S 181.975 Axial†	69.5	27.3	36.536 ug/L	36.536 ppb	19:05:43
2	Sb 206.836†	38.5	-0.6	-0.2204 ug/L	-0.2204 ppb	19:05:43
2	Se 196.026†	-31.8	1.4	0.8360 ug/L	0.8360 ppb	19:05:43
2	Si 251.611†	45853.6	44882.0	1357.8 ug/L	1357.8 ppb	19:05:23
2	Sn 189.927†	2.9	-4.6	-0.7720 ug/L	-0.7720 ppb	19:05:43
2	Ti 334.940†	-1126.3	274.1	0.4215 ug/L	0.4215 ppb	19:05:23
2	Tl 190.801†	-28.2	10.8	3.1304 ug/L	3.1304 ppb	19:05:43
2	U 409.014†	-1764.5	-101.3	-2.8676 ug/L	-2.8676 ppb	19:05:18
2	V 292.402†	-1500.2	-7.2	-0.0582 ug/L	-0.0582 ppb	19:05:23
2	Zn 213.857†	835.6	119.2	1.0764 ug/L	1.0764 ppb	19:05:43
2	SiO2†	46434.1	45428.7	2963.7 ug/L	2963.7 ppb	19:06:24
3	Sc Radial	5634.5	5634.5	106 %		19:04:21
3	Y RADIAL	5922.7	5922.7	104.9 %		19:04:21
3	Al 396.153Radial†	16.0	10.5	8.3382 ug/L	8.3382 ppb	19:04:21
3	Ca 317.933Radial†	31.7	9.4	15.490 ug/L	15.490 ppb	19:04:41
3	Fe 238.204 Radial†	12.9	-0.7	-5.7784 ug/L	-5.7784 ppb	19:04:41
3	K 766.490 Radial†	3420.3	558.2	118.02 ug/L	118.02 ppb	19:04:21
3	Mg 279.077 IEC†	0.4	-2.3	-76.013 ug/L	-76.013 ppb	19:04:41
3	Na 589.592 Radial†	-820.8	322.6	86.690 ug/L	86.690 ppb	19:04:21
3	Sr 421.552†	39.0	25.2	0.1613 ug/L	0.1613 ppb	19:04:21
3	Sc 361.383	972949.6	972949.6	103.05 %		19:05:48
3	Y 371.029	817211.7	817211.7	102.49 %		19:05:48
3	Ag 328.068†	415.3	-8.2	-0.0348 ug/L	-0.0348 ppb	19:05:54
3	As 188.979†	-16.9	3.2	1.2837 ug/L	1.2837 ppb	19:06:14
3	B 249.677†	367.6	884.2	19.184 ug/L	19.184 ppb	19:05:54
3	Ba 233.527†	29.3	8.7	0.0648 ug/L	0.0648 ppb	19:06:14
3	Be 313.107†	-4561.7	104.1	0.0382 ug/L	0.0382 ppb	19:05:54
3	Cd 226.502†	-218.7	4.6	0.0498 ug/L	0.0498 ppb	19:06:14
3	Co 228.616†	-66.5	8.8	0.1728 ug/L	0.1728 ppb	19:06:14
3	Cr 267.716†	102.9	19.8	0.2177 ug/L	0.2177 ppb	19:06:14
3	Cu 324.752†	6487.9	129.4	0.3774 ug/L	0.3774 ppb	19:05:54
3	Mn 257.610†	704.4	228.0	0.2438 ug/L	0.2438 ppb	19:06:14
3	Mo 202.031†	28.7	9.1	0.6095 ug/L	0.6095 ppb	19:06:14
3	Ni 231.604†	113.1	9.2	0.2219 ug/L	0.2219 ppb	19:06:14
3	P 214.914†	239.2	-2.4	-1.4639 ug/L	-1.4639 ppb	19:06:14
3	Pb 220.353†	-67.0	-11.3	-1.3189 ug/L	-1.3189 ppb	19:06:14
3	S 181.975 Axial†	71.4	27.8	37.210 ug/L	37.210 ppb	19:06:14
3	Sb 206.836†	32.0	-7.6	-2.5091 ug/L	-2.5091 ppb	19:06:14
3	Se 196.026†	-21.5	12.0	7.3687 ug/L	7.3687 ppb	19:06:14
3	Si 251.611†	46363.4	44493.8	1346.0 ug/L	1346.0 ppb	19:05:54
3	Sn 189.927†	5.2	-2.4	-0.4058 ug/L	-0.4058 ppb	19:06:14
3	Ti 334.940†	-1034.7	384.7	0.5908 ug/L	0.5908 ppb	19:05:54
3	Tl 190.801†	-36.6	3.3	0.9454 ug/L	0.9454 ppb	19:06:14
3	U 409.014†	-1733.0	-36.8	-1.0416 ug/L	-1.0416 ppb	19:05:48
3	V 292.402†	-1427.6	92.2	0.6113 ug/L	0.6113 ppb	19:05:54
3	Zn 213.857†	848.8	115.9	1.0432 ug/L	1.0432 ppb	19:06:14
3	SiO2†	46101.1	44211.5	2884.3 ug/L	2884.3 ppb	19:06:29

Mean Data: 244226001|940084|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	965695.4	102.28	%	1.081				1.06%
Sc Radial	5619.4	105	%	0.4				0.36%
Y 371.029	810923.6	101.70	%	1.094				1.08%
Y RADIAL	5924.3	104.9	%	0.04				0.04%
Ag 328.068†	-10.8	-0.0488	ug/L	0.02616	-0.0488	ppb	0.02616	53.59%
Al 396.153Radial†	-3.0	-2.4018	ug/L	10.47676	-2.4018	ppb	10.47676	436.21%
As 188.979†	-4.0	-1.6372	ug/L	2.66819	-1.6372	ppb	2.66819	162.97%
B 249.677†	868.3	18.840	ug/L	0.4293	18.840	ppb	0.4293	2.28%
Ba 233.527†	13.3	0.0976	ug/L	0.02929	0.0976	ppb	0.02929	30.02%
Be 313.107†	76.4	0.0282	ug/L	0.02491	0.0282	ppb	0.02491	88.48%
Ca 317.933Radial†	7.2	11.967	ug/L	3.1970	11.967	ppb	3.1970	26.71%
Cd 226.502†	-3.2	-0.0335	ug/L	0.07220	-0.0335	ppb	0.07220	215.61%
Co 228.616†	5.5	0.1064	ug/L	0.07337	0.1064	ppb	0.07337	68.92%
Cr 267.716†	18.7	0.2048	ug/L	0.03036	0.2048	ppb	0.03036	14.82%
Cu 324.752†	157.2	0.4581	ug/L	0.19871	0.4581	ppb	0.19871	43.37%
Fe 238.204 Radial†	-1.3	-11.009	ug/L	5.5384	-11.009	ppb	5.5384	50.31%
K 766.490 Radial†	530.9	112.26	ug/L	7.444	112.26	ppb	7.444	6.63%

Mg 279.077 IEC†	-1.5	-48.199	ug/L	30.2280	-48.199	ppb	30.2280	62.71%
Mn 257.610†	219.3	0.2329	ug/L	0.00956	0.2329	ppb	0.00956	4.10%
Mo 202.031†	3.6	0.2444	ug/L	0.56188	0.2444	ppb	0.56188	229.91%
Na 589.592 Radial†	308.1	82.793	ug/L	3.7915	82.793	ppb	3.7915	4.58%
Ni 231.604†	-0.4	-0.0100	ug/L	0.26962	-0.0100	ppb	0.26962	>999.9%
P 214.914†	4.2	2.3109	ug/L	7.69730	2.3109	ppb	7.69730	333.09%
Pb 220.353†	-12.9	-1.5188	ug/L	0.25851	-1.5188	ppb	0.25851	17.02%
S 181.975 Axial†	28.4	38.027	ug/L	2.0273	38.027	ppb	2.0273	5.33%
Sb 206.836†	-2.3	-0.7740	ug/L	1.53512	-0.7740	ppb	1.53512	198.34%
Se 196.026†	8.0	4.8816	ug/L	3.53419	4.8816	ppb	3.53419	72.40%
Si 251.611†	44568.1	1348.3	ug/L	8.60	1348.3	ppb	8.60	0.64%
Sn 189.927†	-5.0	-0.8415	ug/L	0.47425	-0.8415	ppb	0.47425	56.36%
Sr 421.552†	23.7	0.1517	ug/L	0.01571	0.1517	ppb	0.01571	10.35%
Ti 334.940†	325.8	0.4989	ug/L	0.08556	0.4989	ppb	0.08556	17.15%
Tl 190.801†	3.8	1.0992	ug/L	1.95883	1.0992	ppb	1.95883	178.21%
U 409.014†	-39.8	-1.1271	ug/L	1.69937	-1.1271	ppb	1.69937	150.78%
V 292.402†	51.7	0.3414	ug/L	0.35312	0.3414	ppb	0.35312	103.42%
Zn 213.857†	123.0	1.1088	ug/L	0.08653	1.1088	ppb	0.08653	7.80%
SiO2†	44697.9	2916.0	ug/L	42.05	2916.0	ppb	42.05	1.44%

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/18/2010 19:08:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5347.3	5347.3	100	%			19:10:31
1	Y RADIAL	5608.1	5608.1	99.35	%			19:10:31
1	Al 396.153Radial†	6428.0	6399.1	5096.5	ug/L	5096.5	ppb	19:10:31
1	Ca 317.933Radial†	3143.3	3110.8	5142.9	ug/L	5142.9	ppb	19:10:51
1	Fe 238.204 Radial†	603.1	588.0	5092.7	ug/L	5092.7	ppb	19:10:51
1	K 766.490 Radial†	26478.8	23703.6	5007.3	ug/L	5007.3	ppb	19:10:31
1	Mg 279.077 IEC†	164.2	161.0	5302.9	ug/L	5302.9	ppb	19:10:51
1	Na 589.592 Radial†	34608.2	35576.6	9559.0	ug/L	9559.0	ppb	19:10:31
1	Sr 421.552†	78786.7	78478.4	502.22	ug/L	502.22	ppb	19:10:31
1	Sc 361.383	946110.1	946110.1	100.21	%			19:11:48
1	Y 371.029	785674.3	785674.3	98.533	%			19:11:48
1	Ag 328.068†	114537.2	113888.7	503.88	ug/L	503.88	ppb	19:11:54
1	As 188.979†	1225.7	1242.7	509.83	ug/L	509.83	ppb	19:12:14
1	B 249.677†	22501.0	22981.8	496.36	ug/L	496.36	ppb	19:11:54
1	Ba 233.527†	69089.4	68926.5	505.18	ug/L	505.18	ppb	19:11:54
1	Be 313.107†	1425630.5	1427207.0	506.19	ug/L	506.19	ppb	19:11:48
1	Cd 226.502†	47052.8	47172.1	503.49	ug/L	503.49	ppb	19:11:54
1	Co 228.616†	25860.4	25880.2	505.06	ug/L	505.06	ppb	19:11:54
1	Cr 267.716†	45887.4	45712.3	500.77	ug/L	500.77	ppb	19:11:54
1	Cu 324.752†	179019.4	172482.0	502.68	ug/L	502.68	ppb	19:11:54
1	Mn 257.610†	482321.3	480866.2	509.23	ug/L	509.23	ppb	19:11:48
1	Mo 202.031†	7460.7	7426.5	499.20	ug/L	499.20	ppb	19:12:14
1	Ni 231.604†	21041.5	20897.3	503.89	ug/L	503.89	ppb	19:11:54
1	P 214.914†	4604.4	4360.3	2410.4	ug/L	2410.4	ppb	19:12:14
1	Pb 220.353†	4214.9	4259.9	502.39	ug/L	502.39	ppb	19:12:14
1	S 181.975 Axial†	789.8	746.7	999.97	ug/L	999.97	ppb	19:12:14
1	Sb 206.836†	1566.2	1524.3	520.01	ug/L	520.01	ppb	19:12:14
1	Se 196.026†	802.4	833.7	531.37	ug/L	531.37	ppb	19:12:14
1	Si 251.611†	84532.0	83859.7	2530.8	ug/L	2530.8	ppb	19:11:54
1	Sn 189.927†	2980.2	2966.6	497.43	ug/L	497.43	ppb	19:12:14
1	Ti 334.940†	334611.1	335306.5	507.25	ug/L	507.25	ppb	19:11:48
1	Tl 190.801†	1697.7	1732.9	504.32	ug/L	504.32	ppb	19:12:14
1	U 409.014†	16059.6	17671.3	498.72	ug/L	498.72	ppb	19:11:54
1	V 292.402†	74550.7	75873.8	505.47	ug/L	505.47	ppb	19:11:54
1	Zn 213.857†	56888.5	56062.9	500.71	ug/L	500.71	ppb	19:11:54
1	SiO2†	85505.7	84803.6	5518.9	ug/L	5518.9	ppb	19:13:22
2	Sc Radial	5402.4	5402.4	101	%			19:10:56
2	Y RADIAL	5689.1	5689.1	100.8	%			19:10:56
2	Al 396.153Radial†	6589.7	6493.3	5171.9	ug/L	5171.9	ppb	19:10:56
2	Ca 317.933Radial†	3145.1	3080.7	5093.1	ug/L	5093.1	ppb	19:11:16
2	Fe 238.204 Radial†	605.4	584.1	5059.1	ug/L	5059.1	ppb	19:11:16
2	K 766.490 Radial†	27008.6	23957.0	5060.9	ug/L	5060.9	ppb	19:10:56
2	Mg 279.077 IEC†	163.3	158.4	5218.8	ug/L	5218.8	ppb	19:11:16
2	Na 589.592 Radial†	35391.0	35996.9	9671.9	ug/L	9671.9	ppb	19:10:56
2	Sr 421.552†	80498.4	79365.8	507.90	ug/L	507.90	ppb	19:10:56
2	Sc 361.383	948478.3	948478.3	100.46	%			19:12:20
2	Y 371.029	788021.9	788021.9	98.828	%			19:12:20
2	Ag 328.068†	115645.1	114706.1	507.48	ug/L	507.48	ppb	19:12:25
2	As 188.979†	1218.6	1232.6	505.71	ug/L	505.71	ppb	19:12:45
2	B 249.677†	22730.5	23154.3	500.09	ug/L	500.09	ppb	19:12:25
2	Ba 233.527†	69498.5	69161.6	506.90	ug/L	506.90	ppb	19:12:25
2	Be 313.107†	1428038.4	1426051.6	505.78	ug/L	505.78	ppb	19:12:20
2	Cd 226.502†	47287.0	47288.0	504.73	ug/L	504.73	ppb	19:12:25
2	Co 228.616†	26099.4	26053.7	508.44	ug/L	508.44	ppb	19:12:25
2	Cr 267.716†	46292.8	46001.5	503.93	ug/L	503.93	ppb	19:12:25
2	Cu 324.752†	181035.0	174042.3	507.22	ug/L	507.22	ppb	19:12:25
2	Mn 257.610†	482232.4	479575.9	507.86	ug/L	507.86	ppb	19:12:20
2	Mo 202.031†	7453.3	7400.5	497.45	ug/L	497.45	ppb	19:12:45
2	Ni 231.604†	21172.6	20975.4	505.77	ug/L	505.77	ppb	19:12:25

2	P 214.914†	4582.1	4326.6	2390.2 ug/L	2390.2 ppb	19:12:45
2	Pb 220.353†	4170.5	4205.2	495.97 ug/L	495.97 ppb	19:12:45
2	S 181.975 Axial†	783.3	738.2	988.63 ug/L	988.63 ppb	19:12:45
2	Sb 206.836†	1561.6	1515.8	517.13 ug/L	517.13 ppb	19:12:45
2	Se 196.026†	777.3	806.7	514.70 ug/L	514.70 ppb	19:12:45
2	Si 251.611†	85260.2	84373.9	2546.4 ug/L	2546.4 ppb	19:12:25
2	Sn 189.927†	2970.1	2949.1	494.50 ug/L	494.50 ppb	19:12:45
2	Ti 334.940†	335027.5	334887.2	506.61 ug/L	506.61 ppb	19:12:20
2	Tl 190.801†	1686.5	1717.6	499.85 ug/L	499.85 ppb	19:12:45
2	U 409.014†	16256.0	17826.7	503.12 ug/L	503.12 ppb	19:12:25
2	V 292.402†	75490.7	76623.8	510.38 ug/L	510.38 ppb	19:12:25
2	Zn 213.857†	57352.9	56383.5	503.58 ug/L	503.58 ppb	19:12:25
2	SiO2†	85121.5	84208.0	5480.1 ug/L	5480.1 ppb	19:13:27
3	Sc Radial	5445.9	5445.9	102 %		19:11:21
3	Y RADIAL	5749.5	5749.5	101.9 %		19:11:21
3	Al 396.153Radial†	6574.2	6426.2	5118.0 ug/L	5118.0 ppb	19:11:21
3	Ca 317.933Radial†	3116.4	3027.9	5005.7 ug/L	5005.7 ppb	19:11:41
3	Fe 238.204 Radial†	600.1	574.2	4973.0 ug/L	4973.0 ppb	19:11:41
3	K 766.490 Radial†	26762.9	23503.8	4965.1 ug/L	4965.1 ppb	19:11:21
3	Mg 279.077 IEC†	159.3	153.2	5045.6 ug/L	5045.6 ppb	19:11:41
3	Na 589.592 Radial†	35048.7	35383.0	9506.9 ug/L	9506.9 ppb	19:11:21
3	Sr 421.552†	79712.9	77962.8	498.92 ug/L	498.92 ppb	19:11:21
3	Sc 361.383	943654.4	943654.4	99.948 %		19:12:51
3	Y 371.029	784372.7	784372.7	98.370 %		19:12:51
3	Ag 328.068†	114769.5	114418.6	506.19 ug/L	506.19 ppb	19:12:56
3	As 188.979†	1227.5	1247.8	511.83 ug/L	511.83 ppb	19:13:16
3	B 249.677†	22543.3	23082.7	498.56 ug/L	498.56 ppb	19:12:56
3	Ba 233.527†	69277.9	69294.6	507.87 ug/L	507.87 ppb	19:12:56
3	Be 313.107†	1423095.7	1428373.0	506.61 ug/L	506.61 ppb	19:12:51
3	Cd 226.502†	47166.9	47408.5	506.03 ug/L	506.03 ppb	19:12:56
3	Co 228.616†	25904.8	25991.8	507.24 ug/L	507.24 ppb	19:12:56
3	Cr 267.716†	46146.2	46090.4	504.90 ug/L	504.90 ppb	19:12:56
3	Cu 324.752†	179323.1	173250.7	504.91 ug/L	504.91 ppb	19:12:56
3	Mn 257.610†	480128.2	479924.5	508.23 ug/L	508.23 ppb	19:12:51
3	Mo 202.031†	7490.2	7475.3	502.47 ug/L	502.47 ppb	19:13:16
3	Ni 231.604†	21137.3	21047.9	507.52 ug/L	507.52 ppb	19:12:56
3	P 214.914†	4604.1	4371.9	2416.8 ug/L	2416.8 ppb	19:13:16
3	Pb 220.353†	4221.0	4277.0	504.42 ug/L	504.42 ppb	19:13:16
3	S 181.975 Axial†	784.6	743.5	995.76 ug/L	995.76 ppb	19:13:16
3	Sb 206.836†	1561.1	1523.2	519.76 ug/L	519.76 ppb	19:13:16
3	Se 196.026†	805.4	838.7	534.04 ug/L	534.04 ppb	19:13:16
3	Si 251.611†	84734.1	84281.4	2543.5 ug/L	2543.5 ppb	19:12:56
3	Sn 189.927†	2990.1	2984.2	500.36 ug/L	500.36 ppb	19:13:16
3	Ti 334.940†	333483.3	335047.0	506.85 ug/L	506.85 ppb	19:12:51
3	Tl 190.801†	1692.6	1732.3	504.11 ug/L	504.11 ppb	19:13:16
3	U 409.014†	16124.4	17777.8	501.74 ug/L	501.74 ppb	19:12:56
3	V 292.402†	74917.9	76434.7	509.22 ug/L	509.22 ppb	19:12:56
3	Zn 213.857†	56988.3	56310.5	502.92 ug/L	502.92 ppb	19:12:56
3	SiO2†	84452.3	83971.7	5464.5 ug/L	5464.5 ppb	19:13:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	946080.9	100.20	%	0.255				0.25%
Sc Radial	5398.5	101	%	0.9				0.92%
Y 371.029	786022.9	98.577	%	0.2319				0.24%
Y RADIAL	5682.2	100.7	%	1.26				1.25%
Ag 328.068†	114337.8	505.85	ug/L	1.823	505.85	ppb	1.823	0.36%
QC value within limits for Ag 328.068 Recovery = 101.17%								
Al 396.153Radial†	6439.5	5128.8	ug/L	38.87	5128.8	ppb	38.87	0.76%
QC value within limits for Al 396.153Radial Recovery = 102.58%								
As 188.979†	1241.0	509.12	ug/L	3.125	509.12	ppb	3.125	0.61%
QC value within limits for As 188.979 Recovery = 101.82%								
B 249.677†	23072.9	498.34	ug/L	1.878	498.34	ppb	1.878	0.38%
QC value within limits for B 249.677 Recovery = 99.67%								
Ba 233.527†	69127.6	506.65	ug/L	1.366	506.65	ppb	1.366	0.27%
QC value within limits for Ba 233.527 Recovery = 101.33%								
Be 313.107†	1427210.5	506.19	ug/L	0.411	506.19	ppb	0.411	0.08%
QC value within limits for Be 313.107 Recovery = 101.24%								
Ca 317.933Radial†	3073.1	5080.6	ug/L	69.43	5080.6	ppb	69.43	1.37%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.61%
Cd 226.502†            47289.6      504.75 ug/L        1.270      504.75 ppb        1.270   0.25%
   QC value within limits for Cd 226.502  Recovery = 100.95%
Co 228.616†            25975.2      506.91 ug/L        1.715      506.91 ppb        1.715   0.34%
   QC value within limits for Co 228.616  Recovery = 101.38%
Cr 267.716†            45934.7      503.20 ug/L        2.165      503.20 ppb        2.165   0.43%
   QC value within limits for Cr 267.716  Recovery = 100.64%
Cu 324.752†           173258.3      504.94 ug/L        2.272      504.94 ppb        2.272   0.45%
   QC value within limits for Cu 324.752  Recovery = 100.99%
Fe 238.204 Radial†       582.1      5041.6 ug/L       61.75      5041.6 ppb       61.75   1.22%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.83%
K 766.490 Radial†      23721.5      5011.1 ug/L       48.00      5011.1 ppb       48.00   0.96%
   QC value within limits for K 766.490 Radial  Recovery = 100.22%
Mg 279.077 IEC†          157.5      5189.1 ug/L      131.21      5189.1 ppb      131.21   2.53%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.78%
Mn 257.610†           480122.2      508.44 ug/L        0.707      508.44 ppb        0.707   0.14%
   QC value within limits for Mn 257.610  Recovery = 101.69%
Mo 202.031†             7434.1      499.71 ug/L        2.548      499.71 ppb        2.548   0.51%
   QC value within limits for Mo 202.031  Recovery = 99.94%
Na 589.592 Radial†     35652.2      9579.3 ug/L       84.33      9579.3 ppb       84.33   0.88%
   QC value within limits for Na 589.592 Radial  Recovery = 95.79%
Ni 231.604†            20973.5      505.73 ug/L        1.815      505.73 ppb        1.815   0.36%
   QC value within limits for Ni 231.604  Recovery = 101.15%
P 214.914†              4353.0      2405.8 ug/L       13.92      2405.8 ppb       13.92   0.58%
   QC value within limits for P 214.914  Recovery = 96.23%
Pb 220.353†             4247.3      500.93 ug/L        4.412      500.93 ppb        4.412   0.88%
   QC value within limits for Pb 220.353  Recovery = 100.19%
S 181.975 Axial†         742.8      994.79 ug/L        5.731      994.79 ppb        5.731   0.58%
   QC value within limits for S 181.975 Axial  Recovery = 99.48%
Sb 206.836†             1521.1      518.97 ug/L        1.593      518.97 ppb        1.593   0.31%
   QC value within limits for Sb 206.836  Recovery = 103.79%
Se 196.026†              826.4      526.70 ug/L       10.481      526.70 ppb       10.481   1.99%
   QC value within limits for Se 196.026  Recovery = 105.34%
Si 251.611†            84171.7      2540.2 ug/L        8.29      2540.2 ppb        8.29   0.33%
   QC value within limits for Si 251.611  Recovery = 101.61%
Sn 189.927†             2966.6      497.43 ug/L        2.931      497.43 ppb        2.931   0.59%
   QC value within limits for Sn 189.927  Recovery = 99.49%
Sr 421.552†            78602.3      503.02 ug/L        4.542      503.02 ppb        4.542   0.90%
   QC value within limits for Sr 421.552  Recovery = 100.60%
Ti 334.940†           335080.2      506.90 ug/L        0.322      506.90 ppb        0.322   0.06%
   QC value within limits for Ti 334.940  Recovery = 101.38%
Tl 190.801†             1727.6      502.76 ug/L        2.523      502.76 ppb        2.523   0.50%
   QC value within limits for Tl 190.801  Recovery = 100.55%
U 409.014†             17758.6      501.19 ug/L        2.249      501.19 ppb        2.249   0.45%
   QC value within limits for U 409.014  Recovery = 100.24%
V 292.402†             76310.8      508.35 ug/L        2.569      508.35 ppb        2.569   0.51%
   QC value within limits for V 292.402  Recovery = 101.67%
Zn 213.857†            56252.3      502.40 ug/L        1.505      502.40 ppb        1.505   0.30%
   QC value within limits for Zn 213.857  Recovery = 100.48%
SiO2†                  84327.8      5487.8 ug/L       28.00      5487.8 ppb       28.00   0.51%
   QC value within limits for SiO2  Recovery = 102.62%
All analyte(s) passed QC.
```

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/18/2010 19:15:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5459.6	5459.6	102	%			19:17:33
1	Y RADIAL	5765.6	5765.6	102.1	%			19:17:33
1	Al 396.153Radial†	-21.4	-25.6	-20.484	ug/L	-20.484	ppb	19:17:33
1	Ca 317.933Radial†	20.2	-0.9	-1.4897	ug/L	-1.4897	ppb	19:17:53
1	Fe 238.204 Radial†	11.0	-2.1	-18.411	ug/L	-18.411	ppb	19:17:53
1	K 766.490 Radial†	2761.0	18.5	3.9297	ug/L	3.9297	ppb	19:17:33
1	Mg 279.077 IEC†	3.1	0.4	12.174	ug/L	12.174	ppb	19:17:53
1	Na 589.592 Radial†	-1205.4	-77.4	-20.801	ug/L	-20.801	ppb	19:17:33
1	Sr 421.552†	-6.3	-17.8	-0.1138	ug/L	-0.1138	ppb	19:17:33
1	Sc 361.383	923003.9	923003.9	97.760	%			19:18:50
1	Y 371.029	782045.9	782045.9	98.078	%			19:18:50
1	Ag 328.068†	350.5	-52.7	-0.2330	ug/L	-0.2330	ppb	19:18:50
1	As 188.979†	-28.8	-9.9	-4.0154	ug/L	-4.0154	ppb	19:19:10
1	B 249.677†	-404.6	113.6	2.4692	ug/L	2.4692	ppb	19:19:10
1	Ba 233.527†	-12.2	-32.2	-0.2362	ug/L	-0.2362	ppb	19:19:10
1	Be 313.107†	-4441.0	-12.0	-0.0045	ug/L	-0.0045	ppb	19:18:50
1	Cd 226.502†	-208.0	4.1	0.0437	ug/L	0.0437	ppb	19:19:10
1	Co 228.616†	-80.9	-9.4	-0.1812	ug/L	-0.1812	ppb	19:19:10
1	Cr 267.716†	72.1	-6.3	-0.0667	ug/L	-0.0667	ppb	19:19:10
1	Cu 324.752†	6018.2	-10.4	-0.0275	ug/L	-0.0275	ppb	19:18:50
1	Mn 257.610†	445.2	-0.2	-0.0025	ug/L	-0.0025	ppb	19:19:10
1	Mo 202.031†	25.2	7.0	0.4708	ug/L	0.4708	ppb	19:19:10
1	Ni 231.604†	88.1	-10.4	-0.2518	ug/L	-0.2518	ppb	19:19:10
1	P 214.914†	217.1	-12.5	-7.1664	ug/L	-7.1664	ppb	19:19:10
1	Pb 220.353†	-62.9	-10.6	-1.2500	ug/L	-1.2500	ppb	19:19:10
1	S 181.975 Axial†	37.1	-3.6	-4.7831	ug/L	-4.7831	ppb	19:19:10
1	Sb 206.836†	42.2	4.4	1.4532	ug/L	1.4532	ppb	19:19:10
1	Se 196.026†	-27.7	4.6	2.7263	ug/L	2.7263	ppb	19:19:10
1	Si 251.611†	513.6	28.2	0.8478	ug/L	0.8478	ppb	19:19:10
1	Sn 189.927†	3.5	-3.9	-0.6526	ug/L	-0.6526	ppb	19:19:10
1	Ti 334.940†	-1416.5	-60.1	-0.0892	ug/L	-0.0892	ppb	19:18:50
1	Tl 190.801†	-33.1	4.9	1.4103	ug/L	1.4103	ppb	19:19:10
1	U 409.014†	-1839.7	-236.9	-6.7059	ug/L	-6.7059	ppb	19:18:50
1	V 292.402†	-1477.3	-33.6	-0.2241	ug/L	-0.2241	ppb	19:18:50
1	Zn 213.857†	727.2	36.2	0.3296	ug/L	0.3296	ppb	19:19:10
1	SiO2†	526.7	13.8	0.8854	ug/L	0.8854	ppb	19:20:06
2	Sc Radial	5576.7	5576.7	105	%			19:17:58
2	Y RADIAL	5906.6	5906.6	104.6	%			19:17:58
2	Al 396.153Radial†	-5.7	-10.1	-8.0913	ug/L	-8.0913	ppb	19:17:58
2	Ca 317.933Radial†	20.7	-0.8	-1.3529	ug/L	-1.3529	ppb	19:18:18
2	Fe 238.204 Radial†	13.7	0.2	1.8775	ug/L	1.8775	ppb	19:18:18
2	K 766.490 Radial†	2746.7	-51.6	-10.920	ug/L	-10.920	ppb	19:17:58
2	Mg 279.077 IEC†	0.9	-1.8	-59.866	ug/L	-59.866	ppb	19:18:18
2	Na 589.592 Radial†	-1175.8	-24.5	-6.5916	ug/L	-6.5916	ppb	19:17:58
2	Sr 421.552†	8.2	-3.8	-0.0242	ug/L	-0.0242	ppb	19:17:58
2	Sc 361.383	923813.0	923813.0	97.846	%			19:19:15
2	Y 371.029	782385.0	782385.0	98.121	%			19:19:15
2	Ag 328.068†	312.3	-92.1	-0.3984	ug/L	-0.3984	ppb	19:19:15
2	As 188.979†	-30.5	-11.6	-4.7175	ug/L	-4.7175	ppb	19:19:35
2	B 249.677†	-410.1	108.3	2.3507	ug/L	2.3507	ppb	19:19:35
2	Ba 233.527†	14.7	-4.7	-0.0347	ug/L	-0.0347	ppb	19:19:35
2	Be 313.107†	-4543.1	-112.3	-0.0396	ug/L	-0.0396	ppb	19:19:15
2	Cd 226.502†	-210.6	1.6	0.0159	ug/L	0.0159	ppb	19:19:35
2	Co 228.616†	-81.6	-10.0	-0.1934	ug/L	-0.1934	ppb	19:19:35
2	Cr 267.716†	92.0	14.0	0.1559	ug/L	0.1559	ppb	19:19:35
2	Cu 324.752†	6204.3	174.4	0.5129	ug/L	0.5129	ppb	19:19:15
2	Mn 257.610†	476.5	31.4	0.0359	ug/L	0.0359	ppb	19:19:35
2	Mo 202.031†	28.9	10.7	0.7192	ug/L	0.7192	ppb	19:19:35
2	Ni 231.604†	102.0	3.7	0.0900	ug/L	0.0900	ppb	19:19:35

2	P 214.914†	228.3	-1.2	-0.7931 ug/L	-0.7931 ppb	19:19:35
2	Pb 220.353†	-58.2	-5.7	-0.6714 ug/L	-0.6714 ppb	19:19:35
2	S 181.975 Axial†	40.9	0.3	0.4560 ug/L	0.4560 ppb	19:19:35
2	Sb 206.836†	40.1	2.3	0.7496 ug/L	0.7496 ppb	19:19:35
2	Se 196.026†	-32.1	0.1	0.0568 ug/L	0.0568 ppb	19:19:35
2	Si 251.611†	524.2	38.6	1.1594 ug/L	1.1594 ppb	19:19:35
2	Sn 189.927†	4.6	-2.8	-0.4725 ug/L	-0.4725 ppb	19:19:35
2	Ti 334.940†	-1306.4	53.6	0.0893 ug/L	0.0893 ppb	19:19:15
2	Tl 190.801†	-38.9	-1.1	-0.3024 ug/L	-0.3024 ppb	19:19:35
2	U 409.014†	-1880.7	-277.2	-7.8507 ug/L	-7.8507 ppb	19:19:15
2	V 292.402†	-1472.0	-26.9	-0.1833 ug/L	-0.1833 ppb	19:19:15
2	Zn 213.857†	730.1	38.5	0.3455 ug/L	0.3455 ppb	19:19:35
2	SiO2†	563.6	51.1	3.3117 ug/L	3.3117 ppb	19:20:11
3	Sc Radial	5444.3	5444.3	102 %		19:18:23
3	Y RADIAL	5784.5	5784.5	102.5 %		19:18:23
3	Al 396.153Radial†	-3.0	-7.6	-6.0849 ug/L	-6.0849 ppb	19:18:23
3	Ca 317.933Radial†	17.1	-3.8	-6.3579 ug/L	-6.3579 ppb	19:18:43
3	Fe 238.204 Radial†	11.7	-1.4	-12.045 ug/L	-12.045 ppb	19:18:43
3	K 766.490 Radial†	2659.3	-73.4	-15.502 ug/L	-15.502 ppb	19:18:23
3	Mg 279.077 IEC†	-0.5	-3.2	-103.79 ug/L	-103.79 ppb	19:18:43
3	Na 589.592 Radial†	-1242.9	-117.5	-31.568 ug/L	-31.568 ppb	19:18:23
3	Sr 421.552†	16.3	4.3	0.0274 ug/L	0.0274 ppb	19:18:23
3	Sc 361.383	924487.0	924487.0	97.917 %		19:19:40
3	Y 371.029	784726.5	784726.5	98.414 %		19:19:40
3	Ag 328.068†	384.7	-18.3	-0.0804 ug/L	-0.0804 ppb	19:19:40
3	As 188.979†	-18.9	0.3	0.1081 ug/L	0.1081 ppb	19:20:00
3	B 249.677†	-433.2	85.1	1.8493 ug/L	1.8493 ppb	19:20:00
3	Ba 233.527†	26.1	7.0	0.0497 ug/L	0.0497 ppb	19:20:00
3	Be 313.107†	-4482.6	-47.2	-0.0165 ug/L	-0.0165 ppb	19:19:40
3	Cd 226.502†	-222.8	-10.7	-0.1140 ug/L	-0.1140 ppb	19:20:00
3	Co 228.616†	-76.0	-4.3	-0.0832 ug/L	-0.0832 ppb	19:20:00
3	Cr 267.716†	79.6	1.3	0.0157 ug/L	0.0157 ppb	19:20:00
3	Cu 324.752†	6011.9	-26.8	-0.0751 ug/L	-0.0751 ppb	19:19:40
3	Mn 257.610†	445.3	-0.8	0.0022 ug/L	0.0022 ppb	19:20:00
3	Mo 202.031†	16.9	-1.6	-0.1057 ug/L	-0.1057 ppb	19:20:00
3	Ni 231.604†	97.2	-1.3	-0.0307 ug/L	-0.0307 ppb	19:20:00
3	P 214.914†	237.2	7.7	4.4534 ug/L	4.4534 ppb	19:20:00
3	Pb 220.353†	-72.6	-20.4	-2.3928 ug/L	-2.3928 ppb	19:20:00
3	S 181.975 Axial†	39.4	-1.3	-1.7522 ug/L	-1.7522 ppb	19:20:00
3	Sb 206.836†	48.7	11.0	3.6134 ug/L	3.6134 ppb	19:20:00
3	Se 196.026†	-27.1	5.3	3.1814 ug/L	3.1814 ppb	19:20:00
3	Si 251.611†	520.2	34.1	1.0321 ug/L	1.0321 ppb	19:20:00
3	Sn 189.927†	2.1	-5.3	-0.8909 ug/L	-0.8909 ppb	19:20:00
3	Ti 334.940†	-1315.9	44.9	0.0784 ug/L	0.0784 ppb	19:19:40
3	Tl 190.801†	-43.6	-5.8	-1.6692 ug/L	-1.6692 ppb	19:20:00
3	U 409.014†	-1831.9	-225.9	-6.3968 ug/L	-6.3968 ppb	19:19:40
3	V 292.402†	-1500.8	-55.2	-0.3770 ug/L	-0.3770 ppb	19:19:40
3	Zn 213.857†	713.4	20.9	0.1897 ug/L	0.1897 ppb	19:20:00
3	SiO2†	527.6	13.9	0.9082 ug/L	0.9082 ppb	19:20:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	923768.0	97.841	%	0.0787				0.08%
Sc Radial	5493.5	103	%	1.4				1.32%
Y 371.029	783052.5	98.204	%	0.1831				0.19%
Y RADIAL	5818.9	103.1	%	1.36				1.32%
Ag 328.068†	-54.3	-0.2373	ug/L	0.15904	-0.2373	ppb	0.15904	67.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-14.4	-11.553	ug/L	7.7990	-11.553	ppb	7.7990	67.50%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-7.1	-2.8750	ug/L	2.60715	-2.8750	ppb	2.60715	90.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	102.4	2.2231	ug/L	0.32909	2.2231	ppb	0.32909	14.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-10.0	-0.0737	ug/L	0.14690	-0.0737	ppb	0.14690	199.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-57.2	-0.0202	ug/L	0.01784	-0.0202	ppb	0.01784	88.36%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.9	-3.0668	ug/L	2.85097	-3.0668	ppb	2.85097	92.96%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -1.7     -0.0181 ug/L       0.08418     -0.0181 ppb        0.08418 464.74%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -7.9     -0.1526 ug/L       0.06041     -0.1526 ppb        0.06041  39.58%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.0      0.0350 ug/L       0.11253      0.0350 ppb        0.11253 321.79%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                45.8      0.1368 ug/L       0.32657      0.1368 ppb        0.32657 238.78%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.1     -9.5263 ug/L      10.37627     -9.5263 ppb       10.37627 108.92%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -35.5     -7.4977 ug/L      10.15812     -7.4977 ppb       10.15812 135.48%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.5    -50.495 ug/L       58.5484     -50.495 ppb        58.5484 115.95%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                10.1      0.0118 ug/L       0.02094      0.0118 ppb        0.02094 176.90%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.4      0.3614 ug/L       0.42323      0.3614 ppb        0.42323 117.10%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -73.1     -19.654 ug/L       12.5279     -19.654 ppb        12.5279  63.74%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -2.7     -0.0642 ug/L       0.17336     -0.0642 ppb        0.17336 270.12%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.0     -1.1687 ug/L       5.81898     -1.1687 ppb        5.81898 497.90%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -12.2     -1.4381 ug/L       0.87595     -1.4381 ppb        0.87595  60.91%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.5     -2.0264 ug/L       2.63028     -2.0264 ppb        2.63028 129.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.9      1.9387 ug/L       1.49235      1.9387 ppb        1.49235  76.98%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.3      1.9882 ug/L       1.68798      1.9882 ppb        1.68798  84.90%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                33.6      1.0131 ug/L       0.15665      1.0131 ppb        0.15665  15.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -4.0     -0.6720 ug/L       0.20987     -0.6720 ppb        0.20987  31.23%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.8     -0.0369 ug/L       0.07146     -0.0369 ppb        0.07146 193.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                12.8      0.0262 ug/L       0.10007      0.0262 ppb        0.10007 382.51%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -0.7     -0.1871 ug/L       1.54300     -0.1871 ppb        1.54300 824.65%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -246.7     -6.9845 ug/L       0.76595     -6.9845 ppb        0.76595  10.97%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -38.6     -0.2615 ug/L       0.10211     -0.2615 ppb        0.10211  39.05%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                31.9      0.2883 ug/L       0.08574      0.2883 ppb        0.08574  29.74%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      26.2      1.7017 ug/L       1.39427      1.7017 ppb        1.39427  81.93%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 25
Sample ID: 244226002|940084|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 1/18/2010 19:22:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244226002|940084|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5513.2	5513.2	103	%			19:24:18
1	Y RADIAL	5846.8	5846.8	103.6	%			19:24:18
1	Al 396.153Radial†	14.1	8.9	7.1620	ug/L	7.1620	ppb	19:24:18
1	Ca 317.933Radial†	37.9	16.0	26.496	ug/L	26.496	ppb	19:24:38
1	Fe 238.204 Radial†	13.4	0.2	1.4605	ug/L	1.4605	ppb	19:24:38
1	K 766.490 Radial†	3421.8	630.8	133.39	ug/L	133.39	ppb	19:24:18
1	Mg 279.077 IEC†	3.3	0.5	17.131	ug/L	17.131	ppb	19:24:38
1	Na 589.592 Radial†	-880.8	247.6	66.520	ug/L	66.520	ppb	19:24:18
1	Sr 421.552†	38.1	25.2	0.1609	ug/L	0.1609	ppb	19:24:18
1	Sc 361.383	965074.4	965074.4	102.22	%			19:25:35
1	Y 371.029	810378.7	810378.7	101.63	%			19:25:35
1	Ag 328.068†	311.4	-106.5	-0.4663	ug/L	-0.4663	ppb	19:25:40
1	As 188.979†	-30.9	-10.7	-4.3437	ug/L	-4.3437	ppb	19:26:00
1	B 249.677†	367.6	887.1	19.247	ug/L	19.247	ppb	19:25:40
1	Ba 233.527†	102.8	80.9	0.5930	ug/L	0.5930	ppb	19:26:00
1	Be 313.107†	-4575.0	55.0	0.0205	ug/L	0.0205	ppb	19:25:40
1	Cd 226.502†	-210.7	10.7	0.1150	ug/L	0.1150	ppb	19:26:00
1	Co 228.616†	-70.8	4.1	0.0799	ug/L	0.0799	ppb	19:26:00
1	Cr 267.716†	111.3	28.8	0.3157	ug/L	0.3157	ppb	19:26:00
1	Cu 324.752†	6540.4	232.1	0.6758	ug/L	0.6758	ppb	19:25:40
1	Mn 257.610†	936.4	460.6	0.4869	ug/L	0.4869	ppb	19:26:00
1	Mo 202.031†	18.1	-1.1	-0.0729	ug/L	-0.0729	ppb	19:26:00
1	Ni 231.604†	114.5	11.5	0.2774	ug/L	0.2774	ppb	19:26:00
1	P 214.914†	239.1	-0.6	-0.5035	ug/L	-0.5035	ppb	19:26:00
1	Pb 220.353†	-64.2	-9.1	-1.0693	ug/L	-1.0693	ppb	19:26:00
1	S 181.975 Axial†	58.5	15.7	21.076	ug/L	21.076	ppb	19:26:00
1	Sb 206.836†	41.4	1.8	0.5906	ug/L	0.5906	ppb	19:26:00
1	Se 196.026†	-20.0	13.4	8.1956	ug/L	8.1956	ppb	19:26:00
1	Si 251.611†	44908.1	43437.3	1314.1	ug/L	1314.1	ppb	19:25:40
1	Sn 189.927†	7.0	-0.6	-0.1035	ug/L	-0.1035	ppb	19:26:00
1	Ti 334.940†	-1107.8	305.0	0.4630	ug/L	0.4630	ppb	19:25:40
1	Tl 190.801†	-27.6	11.7	3.3986	ug/L	3.3986	ppb	19:26:00
1	U 409.014†	-1638.5	41.9	1.1866	ug/L	1.1866	ppb	19:25:35
1	V 292.402†	-1397.7	110.1	0.7248	ug/L	0.7248	ppb	19:25:40
1	Zn 213.857†	873.5	146.9	1.3203	ug/L	1.3203	ppb	19:26:00
1	SiO2†	44164.2	42681.7	2784.5	ug/L	2784.5	ppb	19:27:06
2	Sc Radial	5599.4	5599.4	105	%			19:24:43
2	Y RADIAL	5981.2	5981.2	106.0	%			19:24:43
2	Al 396.153Radial†	13.7	8.4	6.7577	ug/L	6.7577	ppb	19:24:43
2	Ca 317.933Radial†	39.3	16.8	27.719	ug/L	27.719	ppb	19:25:03
2	Fe 238.204 Radial†	10.5	-2.8	-24.534	ug/L	-24.534	ppb	19:25:03
2	K 766.490 Radial†	3260.7	426.7	90.224	ug/L	90.224	ppb	19:24:43
2	Mg 279.077 IEC†	1.7	-1.0	-33.186	ug/L	-33.186	ppb	19:25:03
2	Na 589.592 Radial†	-925.3	218.4	58.672	ug/L	58.672	ppb	19:24:43
2	Sr 421.552†	29.1	16.1	0.1026	ug/L	0.1026	ppb	19:24:43
2	Sc 361.383	962745.4	962745.4	101.97	%			19:26:05
2	Y 371.029	807667.9	807667.9	101.29	%			19:26:05
2	Ag 328.068†	429.8	10.3	0.0431	ug/L	0.0431	ppb	19:26:10
2	As 188.979†	-27.4	-7.3	-2.9792	ug/L	-2.9792	ppb	19:26:30
2	B 249.677†	369.0	889.4	19.300	ug/L	19.300	ppb	19:26:10
2	Ba 233.527†	98.7	77.1	0.5636	ug/L	0.5636	ppb	19:26:30
2	Be 313.107†	-4602.5	17.2	0.0070	ug/L	0.0070	ppb	19:26:10
2	Cd 226.502†	-202.0	18.8	0.2026	ug/L	0.2026	ppb	19:26:30
2	Co 228.616†	-69.5	5.2	0.1016	ug/L	0.1016	ppb	19:26:30
2	Cr 267.716†	105.6	23.5	0.2593	ug/L	0.2593	ppb	19:26:30
2	Cu 324.752†	6545.7	252.8	0.7383	ug/L	0.7383	ppb	19:26:10
2	Mn 257.610†	933.7	460.1	0.4859	ug/L	0.4859	ppb	19:26:30
2	Mo 202.031†	16.2	-2.9	-0.1943	ug/L	-0.1943	ppb	19:26:30
2	Ni 231.604†	124.7	21.7	0.5244	ug/L	0.5244	ppb	19:26:30

2	P 214.914†	238.7	-0.5	-0.4342 ug/L	-0.4342 ppb	19:26:30
2	Pb 220.353†	-43.9	10.7	1.2631 ug/L	1.2631 ppb	19:26:30
2	S 181.975 Axial†	68.8	25.9	34.770 ug/L	34.770 ppb	19:26:30
2	Sb 206.836†	40.2	0.7	0.2009 ug/L	0.2009 ppb	19:26:30
2	Se 196.026†	-18.5	14.8	8.9855 ug/L	8.9855 ppb	19:26:30
2	Si 251.611†	44647.3	43287.8	1309.5 ug/L	1309.5 ppb	19:26:10
2	Sn 189.927†	-0.1	-7.5	-1.2583 ug/L	-1.2583 ppb	19:26:30
2	Ti 334.940†	-1133.3	277.4	0.4284 ug/L	0.4284 ppb	19:26:10
2	Tl 190.801†	-37.6	1.9	0.5466 ug/L	0.5466 ppb	19:26:30
2	U 409.014†	-1864.3	-183.3	-5.1893 ug/L	-5.1893 ppb	19:26:05
2	V 292.402†	-1438.5	66.9	0.4294 ug/L	0.4294 ppb	19:26:10
2	Zn 213.857†	864.0	139.6	1.2562 ug/L	1.2562 ppb	19:26:30
2	SiO2†	44969.5	43575.9	2842.8 ug/L	2842.8 ppb	19:27:11
3	Sc Radial	5554.5	5554.5	104 %		19:25:08
3	Y RADIAL	5886.5	5886.5	104.3 %		19:25:08
3	Al 396.153Radial†	13.3	8.1	6.4296 ug/L	6.4296 ppb	19:25:08
3	Ca 317.933Radial†	35.2	13.2	21.802 ug/L	21.802 ppb	19:25:28
3	Fe 238.204 Radial†	11.3	-2.0	-17.330 ug/L	-17.330 ppb	19:25:28
3	K 766.490 Radial†	3461.4	644.3	136.24 ug/L	136.24 ppb	19:25:08
3	Mg 279.077 IEC†	1.6	-1.1	-37.536 ug/L	-37.536 ppb	19:25:28
3	Na 589.592 Radial†	-952.1	185.5	49.846 ug/L	49.846 ppb	19:25:08
3	Sr 421.552†	8.9	-3.2	-0.0204 ug/L	-0.0204 ppb	19:25:08
3	Sc 361.383	963784.4	963784.4	102.08 %		19:26:36
3	Y 371.029	811400.0	811400.0	101.76 %		19:26:36
3	Ag 328.068†	422.1	2.3	0.0074 ug/L	0.0074 ppb	19:26:41
3	As 188.979†	-20.8	-0.8	-0.3368 ug/L	-0.3368 ppb	19:27:01
3	B 249.677†	328.6	849.4	18.433 ug/L	18.433 ppb	19:26:41
3	Ba 233.527†	108.1	86.2	0.6300 ug/L	0.6300 ppb	19:27:01
3	Be 313.107†	-4544.0	79.3	0.0293 ug/L	0.0293 ppb	19:26:41
3	Cd 226.502†	-208.6	12.6	0.1353 ug/L	0.1353 ppb	19:27:01
3	Co 228.616†	-82.6	-7.5	-0.1454 ug/L	-0.1454 ppb	19:27:01
3	Cr 267.716†	113.9	31.5	0.3459 ug/L	0.3459 ppb	19:27:01
3	Cu 324.752†	6549.6	249.7	0.7284 ug/L	0.7284 ppb	19:26:41
3	Mn 257.610†	945.4	470.6	0.4979 ug/L	0.4979 ppb	19:27:01
3	Mo 202.031†	27.3	8.0	0.5351 ug/L	0.5351 ppb	19:27:01
3	Ni 231.604†	103.7	1.1	0.0254 ug/L	0.0254 ppb	19:27:01
3	P 214.914†	250.5	10.9	6.1037 ug/L	6.1037 ppb	19:27:01
3	Pb 220.353†	-61.6	-6.6	-0.7658 ug/L	-0.7658 ppb	19:27:01
3	S 181.975 Axial†	75.9	32.8	43.980 ug/L	43.980 ppb	19:27:01
3	Sb 206.836†	39.2	-0.3	-0.1081 ug/L	-0.1081 ppb	19:27:01
3	Se 196.026†	-28.7	4.8	2.8868 ug/L	2.8868 ppb	19:27:01
3	Si 251.611†	44466.9	43063.8	1302.8 ug/L	1302.8 ppb	19:26:41
3	Sn 189.927†	-1.1	-8.5	-1.4233 ug/L	-1.4233 ppb	19:27:01
3	Ti 334.940†	-1058.5	351.8	0.5396 ug/L	0.5396 ppb	19:26:41
3	Tl 190.801†	-41.5	-1.9	-0.5511 ug/L	-0.5511 ppb	19:27:01
3	U 409.014†	-1789.0	-107.7	-3.0477 ug/L	-3.0477 ppb	19:26:36
3	V 292.402†	-1481.2	26.5	0.1771 ug/L	0.1771 ppb	19:26:41
3	Zn 213.857†	874.2	148.7	1.3401 ug/L	1.3401 ppb	19:27:01
3	SiO2†	44633.7	43199.4	2818.2 ug/L	2818.2 ppb	19:27:16

Mean Data: 244226002|940084|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	963868.1	102.09	%	0.124				0.12%
Sc Radial	5555.7	104	%	0.8				0.78%
Y 371.029	809815.6	101.56	%	0.242				0.24%
Y RADIAL	5904.8	104.6	%	1.22				1.17%
Ag 328.068†	-31.3	-0.1386	ug/L	0.28435	-0.1386	ppb	0.28435	205.19%
Al 396.153Radial†	8.5	6.7831	ug/L	0.36690	6.7831	ppb	0.36690	5.41%
As 188.979†	-6.3	-2.5532	ug/L	2.03714	-2.5532	ppb	2.03714	79.79%
B 249.677†	875.3	18.993	ug/L	0.4859	18.993	ppb	0.4859	2.56%
Ba 233.527†	81.4	0.5956	ug/L	0.03330	0.5956	ppb	0.03330	5.59%
Be 313.107†	50.5	0.0189	ug/L	0.01120	0.0189	ppb	0.01120	59.13%
Ca 317.933Radial†	15.3	25.339	ug/L	3.1233	25.339	ppb	3.1233	12.33%
Cd 226.502†	14.0	0.1510	ug/L	0.04585	0.1510	ppb	0.04585	30.37%
Co 228.616†	0.6	0.0120	ug/L	0.13674	0.0120	ppb	0.13674	>999.9%
Cr 267.716†	27.9	0.3069	ug/L	0.04398	0.3069	ppb	0.04398	14.33%
Cu 324.752†	244.8	0.7142	ug/L	0.03361	0.7142	ppb	0.03361	4.71%
Fe 238.204 Radial†	-1.6	-13.468	ug/L	13.4207	-13.468	ppb	13.4207	99.65%
K 766.490 Radial†	567.3	119.95	ug/L	25.785	119.95	ppb	25.785	21.50%

Mg 279.077 IEC†	-0.5	-17.864	ug/L	30.3846	-17.864	ppb	30.3846 170.09%
Mn 257.610†	463.8	0.4902	ug/L	0.00664	0.4902	ppb	0.00664 1.35%
Mo 202.031†	1.3	0.0893	ug/L	0.39080	0.0893	ppb	0.39080 437.69%
Na 589.592 Radial†	217.2	58.346	ug/L	8.3418	58.346	ppb	8.3418 14.30%
Ni 231.604†	11.4	0.2758	ug/L	0.24950	0.2758	ppb	0.24950 90.47%
P 214.914†	3.2	1.7220	ug/L	3.79481	1.7220	ppb	3.79481 220.38%
Pb 220.353†	-1.6	-0.1907	ug/L	1.26814	-0.1907	ppb	1.26814 665.05%
S 181.975 Axial†	24.8	33.275	ug/L	11.5251	33.275	ppb	11.5251 34.64%
Sb 206.836†	0.7	0.2278	ug/L	0.35008	0.2278	ppb	0.35008 153.68%
Se 196.026†	11.0	6.6893	ug/L	3.31666	6.6893	ppb	3.31666 49.58%
Si 251.611†	43263.0	1308.8	ug/L	5.69	1308.8	ppb	5.69 0.43%
Sn 189.927†	-5.6	-0.9283	ug/L	0.71910	-0.9283	ppb	0.71910 77.46%
Sr 421.552†	12.7	0.0811	ug/L	0.09255	0.0811	ppb	0.09255 114.18%
Ti 334.940†	311.4	0.4770	ug/L	0.05693	0.4770	ppb	0.05693 11.94%
Tl 190.801†	3.9	1.1314	ug/L	2.03877	1.1314	ppb	2.03877 180.20%
U 409.014†	-83.0	-2.3501	ug/L	3.24466	-2.3501	ppb	3.24466 138.06%
V 292.402†	67.8	0.4438	ug/L	0.27413	0.4438	ppb	0.27413 61.77%
Zn 213.857†	145.1	1.3055	ug/L	0.04389	1.3055	ppb	0.04389 3.36%
SiO2†	43152.3	2815.2	ug/L	29.29	2815.2	ppb	29.29 1.04%

Sequence No.: 33
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/18/2010 20:17:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5290.7	5290.7	99.3	%			20:19:24
1	Y RADIAL	5592.2	5592.2	99.07	%			20:19:24
1	Al 396.153Radial†	6518.0	6558.4	5222.9	ug/L	5222.9	ppb	20:19:24
1	Ca 317.933Radial†	3049.8	3050.2	5042.7	ug/L	5042.7	ppb	20:19:44
1	Fe 238.204 Radial†	579.1	570.3	4939.8	ug/L	4939.8	ppb	20:19:44
1	K 766.490 Radial†	26456.3	23963.3	5062.4	ug/L	5062.4	ppb	20:19:24
1	Mg 279.077 IEC†	156.7	155.2	5112.3	ug/L	5112.3	ppb	20:19:44
1	Na 589.592 Radial†	33178.6	34506.1	9271.3	ug/L	9271.3	ppb	20:19:24
1	Sr 421.552†	77617.1	78140.7	500.06	ug/L	500.06	ppb	20:19:24
1	Sc 361.383	919272.8	919272.8	97.365	%			20:20:43
1	Y 371.029	763981.6	763981.6	95.813	%			20:20:43
1	Ag 328.068†	113543.2	116204.6	514.08	ug/L	514.08	ppb	20:20:43
1	As 188.979†	1202.5	1254.6	514.66	ug/L	514.66	ppb	20:21:03
1	B 249.677†	22118.9	23245.0	502.08	ug/L	502.08	ppb	20:20:43
1	Ba 233.527†	68634.7	70472.4	516.50	ug/L	516.50	ppb	20:20:43
1	Be 313.107†	1421356.7	1464351.1	519.36	ug/L	519.36	ppb	20:20:43
1	Cd 226.502†	46645.6	48124.8	513.68	ug/L	513.68	ppb	20:20:43
1	Co 228.616†	25386.8	26147.2	510.29	ug/L	510.29	ppb	20:21:03
1	Cr 267.716†	45764.2	46922.5	514.03	ug/L	514.03	ppb	20:20:43
1	Cu 324.752†	179092.2	177772.2	518.10	ug/L	518.10	ppb	20:20:43
1	Mn 257.610†	477907.6	490384.8	519.30	ug/L	519.30	ppb	20:20:43
1	Mo 202.031†	7528.3	7713.3	518.45	ug/L	518.45	ppb	20:21:03
1	Ni 231.604†	20763.8	21225.1	511.80	ug/L	511.80	ppb	20:21:03
1	P 214.914†	4588.5	4478.1	2475.5	ug/L	2475.5	ppb	20:21:03
1	Pb 220.353†	4220.8	4388.7	517.62	ug/L	517.62	ppb	20:21:03
1	S 181.975 Axial†	783.4	763.1	1021.9	ug/L	1021.9	ppb	20:21:03
1	Sb 206.836†	1533.9	1536.7	524.74	ug/L	524.74	ppb	20:21:03
1	Se 196.026†	778.6	832.6	530.21	ug/L	530.21	ppb	20:21:03
1	Si 251.611†	83901.2	85674.5	2585.4	ug/L	2585.4	ppb	20:20:43
1	Sn 189.927†	2986.1	3059.4	512.96	ug/L	512.96	ppb	20:21:03
1	Ti 334.940†	332066.8	342441.7	518.05	ug/L	518.05	ppb	20:20:43
1	Tl 190.801†	1702.0	1786.8	519.98	ug/L	519.98	ppb	20:21:03
1	U 409.014†	15206.4	17262.9	487.14	ug/L	487.14	ppb	20:20:43
1	V 292.402†	74274.3	77761.7	518.13	ug/L	518.13	ppb	20:20:43
1	Zn 213.857†	56435.0	57254.5	511.39	ug/L	511.39	ppb	20:20:43
1	SiO2†	83487.2	85221.5	5545.6	ug/L	5545.6	ppb	20:22:04
2	Sc Radial	5334.0	5334.0	100	%			20:19:49
2	Y RADIAL	5596.6	5596.6	99.14	%			20:19:49
2	Al 396.153Radial†	6420.3	6407.4	5102.9	ug/L	5102.9	ppb	20:19:49
2	Ca 317.933Radial†	3099.9	3075.3	5084.2	ug/L	5084.2	ppb	20:20:09
2	Fe 238.204 Radial†	582.5	568.9	4927.1	ug/L	4927.1	ppb	20:20:09
2	K 766.490 Radial†	26199.3	23490.0	4962.4	ug/L	4962.4	ppb	20:19:49
2	Mg 279.077 IEC†	159.5	156.6	5159.2	ug/L	5159.2	ppb	20:20:09
2	Na 589.592 Radial†	32646.0	33702.5	9055.4	ug/L	9055.4	ppb	20:19:49
2	Sr 421.552†	76196.1	76086.1	486.91	ug/L	486.91	ppb	20:19:49
2	Sc 361.383	942909.0	942909.0	99.869	%			20:21:11
2	Y 371.029	784092.8	784092.8	98.335	%			20:21:11
2	Ag 328.068†	113398.0	113135.9	500.53	ug/L	500.53	ppb	20:21:11
2	As 188.979†	1222.8	1244.0	510.26	ug/L	510.26	ppb	20:21:31
2	B 249.677†	22310.8	22867.7	493.93	ug/L	493.93	ppb	20:21:11
2	Ba 233.527†	68428.7	68499.0	502.04	ug/L	502.04	ppb	20:21:11
2	Be 313.107†	1416469.9	1422864.0	504.65	ug/L	504.65	ppb	20:21:11
2	Cd 226.502†	46490.6	46768.7	499.19	ug/L	499.19	ppb	20:21:11
2	Co 228.616†	25353.0	25459.7	496.87	ug/L	496.87	ppb	20:21:31
2	Cr 267.716†	45513.1	45492.9	498.37	ug/L	498.37	ppb	20:21:11
2	Cu 324.752†	178936.1	173005.0	504.21	ug/L	504.21	ppb	20:21:11
2	Mn 257.610†	475810.9	475981.2	504.05	ug/L	504.05	ppb	20:21:11
2	Mo 202.031†	7504.2	7495.3	503.81	ug/L	503.81	ppb	20:21:31
2	Ni 231.604†	20726.7	20653.4	498.01	ug/L	498.01	ppb	20:21:31

2	P 214.914†	4584.4	4355.8	2407.7 ug/L	2407.7 ppb	20:21:31
2	Pb 220.353†	4229.5	4288.8	505.82 ug/L	505.82 ppb	20:21:31
2	S 181.975 Axial†	784.4	743.9	996.25 ug/L	996.25 ppb	20:21:31
2	Sb 206.836†	1557.3	1520.7	518.94 ug/L	518.94 ppb	20:21:31
2	Se 196.026†	782.4	816.3	520.16 ug/L	520.16 ppb	20:21:31
2	Si 251.611†	83612.6	83225.5	2511.5 ug/L	2511.5 ppb	20:21:11
2	Sn 189.927†	2983.5	2979.9	499.65 ug/L	499.65 ppb	20:21:31
2	Ti 334.940†	330937.2	332761.4	503.41 ug/L	503.41 ppb	20:21:11
2	Tl 190.801†	1701.7	1742.7	507.14 ug/L	507.14 ppb	20:21:31
2	U 409.014†	15149.8	16814.6	474.48 ug/L	474.48 ppb	20:21:11
2	V 292.402†	73935.2	75510.0	503.12 ug/L	503.12 ppb	20:21:11
2	Zn 213.857†	56382.0	55748.5	497.93 ug/L	497.93 ppb	20:21:11
2	SiO2†	84267.8	83853.7	5456.8 ug/L	5456.8 ppb	20:22:09
3	Sc Radial	5405.5	5405.5	101 %		20:20:14
3	Y RADIAL	5694.8	5694.8	100.9 %		20:20:14
3	Al 396.153Radial†	6549.9	6450.4	5137.7 ug/L	5137.7 ppb	20:20:14
3	Ca 317.933Radial†	3123.7	3057.8	5055.3 ug/L	5055.3 ppb	20:20:34
3	Fe 238.204 Radial†	592.6	571.2	4947.1 ug/L	4947.1 ppb	20:20:34
3	K 766.490 Radial†	26560.3	23499.9	4964.5 ug/L	4964.5 ppb	20:20:14
3	Mg 279.077 IEC†	158.3	153.4	5051.7 ug/L	5051.7 ppb	20:20:34
3	Na 589.592 Radial†	33279.6	33896.0	9107.4 ug/L	9107.4 ppb	20:20:14
3	Sr 421.552†	77983.2	76841.4	491.75 ug/L	491.75 ppb	20:20:14
3	Sc 361.383	962043.0	962043.0	101.90 %		20:21:38
3	Y 371.029	800680.1	800680.1	100.42 %		20:21:38
3	Ag 328.068†	113395.2	110874.9	490.58 ug/L	490.58 ppb	20:21:38
3	As 188.979†	1208.7	1205.8	494.68 ug/L	494.68 ppb	20:21:58
3	B 249.677†	22348.3	22460.1	485.11 ug/L	485.11 ppb	20:21:38
3	Ba 233.527†	68752.0	67453.5	494.38 ug/L	494.38 ppb	20:21:38
3	Be 313.107†	1424407.8	1402445.3	497.40 ug/L	497.40 ppb	20:21:38
3	Cd 226.502†	46652.0	46001.1	490.99 ug/L	490.99 ppb	20:21:38
3	Co 228.616†	25379.1	24980.4	487.52 ug/L	487.52 ppb	20:21:58
3	Cr 267.716†	45757.9	44826.8	491.07 ug/L	491.07 ppb	20:21:38
3	Cu 324.752†	178543.5	169056.2	492.71 ug/L	492.71 ppb	20:21:38
3	Mn 257.610†	477540.0	468202.4	495.82 ug/L	495.82 ppb	20:21:38
3	Mo 202.031†	7516.8	7358.2	494.60 ug/L	494.60 ppb	20:21:58
3	Ni 231.604†	20761.2	20274.5	488.87 ug/L	488.87 ppb	20:21:58
3	P 214.914†	4581.9	4262.2	2356.0 ug/L	2356.0 ppb	20:21:58
3	Pb 220.353†	4231.7	4206.7	496.16 ug/L	496.16 ppb	20:21:58
3	S 181.975 Axial†	774.4	718.5	962.21 ug/L	962.21 ppb	20:21:58
3	Sb 206.836†	1557.4	1489.7	508.36 ug/L	508.36 ppb	20:21:58
3	Se 196.026†	778.2	796.7	508.14 ug/L	508.14 ppb	20:21:58
3	Si 251.611†	83851.4	81794.7	2468.4 ug/L	2468.4 ppb	20:21:38
3	Sn 189.927†	2968.3	2905.6	487.21 ug/L	487.21 ppb	20:21:58
3	Ti 334.940†	331513.2	326736.0	494.31 ug/L	494.31 ppb	20:21:38
3	Tl 190.801†	1696.1	1703.3	495.68 ug/L	495.68 ppb	20:21:58
3	U 409.014†	15104.4	16468.4	464.69 ug/L	464.69 ppb	20:21:38
3	V 292.402†	74371.6	74465.9	496.11 ug/L	496.11 ppb	20:21:38
3	Zn 213.857†	56506.6	54748.0	488.98 ug/L	488.98 ppb	20:21:38
3	SiO2†	83845.0	81760.5	5320.5 ug/L	5320.5 ppb	20:22:14

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	941408.3	99.710	%	2.2692				2.28%
Sc Radial	5343.4	100	%	1.1				1.09%
Y 371.029	782918.2	98.188	%	2.3048				2.35%
Y RADIAL	5627.9	99.70	%	1.028				1.03%
Ag 328.068†	113405.2	501.73	ug/L	11.795	501.73	ppb	11.795	2.35%
QC value within limits for Ag 328.068 Recovery = 100.35%								
Al 396.153Radial†	6472.0	5154.5	ug/L	61.78	5154.5	ppb	61.78	1.20%
QC value within limits for Al 396.153Radial Recovery = 103.09%								
As 188.979†	1234.8	506.53	ug/L	10.499	506.53	ppb	10.499	2.07%
QC value within limits for As 188.979 Recovery = 101.31%								
B 249.677†	22857.6	493.71	ug/L	8.485	493.71	ppb	8.485	1.72%
QC value within limits for B 249.677 Recovery = 98.74%								
Ba 233.527†	68808.3	504.31	ug/L	11.232	504.31	ppb	11.232	2.23%
QC value within limits for Ba 233.527 Recovery = 100.86%								
Be 313.107†	1429886.8	507.14	ug/L	11.190	507.14	ppb	11.190	2.21%
QC value within limits for Be 313.107 Recovery = 101.43%								
Ca 317.933Radial†	3061.1	5060.7	ug/L	21.30	5060.7	ppb	21.30	0.42%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.21%
Cd 226.502†            46964.9      501.29 ug/L        11.490      501.29 ppb        11.490   2.29%
   QC value within limits for Cd 226.502  Recovery = 100.26%
Co 228.616†            25529.1      498.23 ug/L        11.448      498.23 ppb        11.448   2.30%
   QC value within limits for Co 228.616  Recovery = 99.65%
Cr 267.716†            45747.4      501.16 ug/L        11.727      501.16 ppb        11.727   2.34%
   QC value within limits for Cr 267.716  Recovery = 100.23%
Cu 324.752†           173277.8      505.00 ug/L        12.713      505.00 ppb        12.713   2.52%
   QC value within limits for Cu 324.752  Recovery = 101.00%
Fe 238.204 Radial†       570.1      4938.0 ug/L         10.15      4938.0 ppb         10.15   0.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 98.76%
K 766.490 Radial†      23651.1      4996.4 ug/L         57.15      4996.4 ppb         57.15   1.14%
   QC value within limits for K 766.490 Radial  Recovery = 99.93%
Mg 279.077 IEC†          155.0      5107.7 ug/L         53.87      5107.7 ppb         53.87   1.05%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.15%
Mn 257.610†           478189.5      506.39 ug/L        11.911      506.39 ppb        11.911   2.35%
   QC value within limits for Mn 257.610  Recovery = 101.28%
Mo 202.031†             7522.3      505.62 ug/L        12.025      505.62 ppb        12.025   2.38%
   QC value within limits for Mo 202.031  Recovery = 101.12%
Na 589.592 Radial†     34034.9      9144.7 ug/L        112.68      9144.7 ppb        112.68   1.23%
   QC value within limits for Na 589.592 Radial  Recovery = 91.45%
Ni 231.604†            20717.7      499.56 ug/L        11.540      499.56 ppb        11.540   2.31%
   QC value within limits for Ni 231.604  Recovery = 99.91%
P 214.914†              4365.4      2413.1 ug/L         59.91      2413.1 ppb         59.91   2.48%
   QC value within limits for P 214.914  Recovery = 96.52%
Pb 220.353†             4294.7      506.53 ug/L        10.748      506.53 ppb        10.748   2.12%
   QC value within limits for Pb 220.353  Recovery = 101.31%
S 181.975 Axial†         741.8      993.47 ug/L        29.960      993.47 ppb        29.960   3.02%
   QC value within limits for S 181.975 Axial  Recovery = 99.35%
Sb 206.836†             1515.7      517.35 ug/L         8.304      517.35 ppb         8.304   1.61%
   QC value within limits for Sb 206.836  Recovery = 103.47%
Se 196.026†              815.2      519.51 ug/L        11.050      519.51 ppb        11.050   2.13%
   QC value within limits for Se 196.026  Recovery = 103.90%
Si 251.611†            83564.9      2521.8 ug/L         59.21      2521.8 ppb         59.21   2.35%
   QC value within limits for Si 251.611  Recovery = 100.87%
Sn 189.927†             2981.6      499.94 ug/L        12.878      499.94 ppb        12.878   2.58%
   QC value within limits for Sn 189.927  Recovery = 99.99%
Sr 421.552†            77022.7      492.91 ug/L         6.651      492.91 ppb         6.651   1.35%
   QC value within limits for Sr 421.552  Recovery = 98.58%
Ti 334.940†           333979.7      505.25 ug/L        11.978      505.25 ppb        11.978   2.37%
   QC value within limits for Ti 334.940  Recovery = 101.05%
Tl 190.801†             1744.3      507.60 ug/L        12.157      507.60 ppb        12.157   2.39%
   QC value within limits for Tl 190.801  Recovery = 101.52%
U 409.014†             16848.6      475.44 ug/L        11.255      475.44 ppb        11.255   2.37%
   QC value within limits for U 409.014  Recovery = 95.09%
V 292.402†             75912.5      505.79 ug/L        11.248      505.79 ppb        11.248   2.22%
   QC value within limits for V 292.402  Recovery = 101.16%
Zn 213.857†            55917.0      499.43 ug/L        11.277      499.43 ppb        11.277   2.26%
   QC value within limits for Zn 213.857  Recovery = 99.89%
SiO2†                  83611.9      5441.0 ug/L        113.40      5441.0 ppb        113.40   2.08%
   QC value within limits for SiO2  Recovery = 101.75%
All analyte(s) passed QC.
```

Sequence No.: 34
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/18/2010 20:24:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5354.5	5354.5	101	%			20:26:15
1	Y RADIAL	5680.4	5680.4	100.6	%			20:26:15
1	Al 396.153Radial†	5.6	1.0	0.7713	ug/L	0.7713	ppb	20:26:15
1	Ca 317.933Radial†	16.5	-4.2	-6.8635	ug/L	-6.8635	ppb	20:26:35
1	Fe 238.204 Radial†	11.6	-1.3	-11.161	ug/L	-11.161	ppb	20:26:35
1	K 766.490 Radial†	2804.2	114.5	24.226	ug/L	24.226	ppb	20:26:15
1	Mg 279.077 IEC†	3.7	1.1	34.901	ug/L	34.901	ppb	20:26:35
1	Na 589.592 Radial†	-1255.7	-150.6	-40.476	ug/L	-40.476	ppb	20:26:15
1	Sr 421.552†	15.9	4.1	0.0264	ug/L	0.0264	ppb	20:26:15
1	Sc 361.383	889346.7	889346.7	94.196	%			20:27:32
1	Y 371.029	781633.1	781633.1	98.026	%			20:27:32
1	Ag 328.068†	519.9	140.8	0.6228	ug/L	0.6228	ppb	20:27:32
1	As 188.979†	-37.0	-19.6	-7.9941	ug/L	-7.9941	ppb	20:27:52
1	B 249.677†	-446.1	53.9	1.1709	ug/L	1.1709	ppb	20:27:52
1	Ba 233.527†	13.1	-5.8	-0.0435	ug/L	-0.0435	ppb	20:27:52
1	Be 313.107†	-4494.9	-241.2	-0.0855	ug/L	-0.0855	ppb	20:27:32
1	Cd 226.502†	-204.1	0.2	0.0010	ug/L	0.0010	ppb	20:27:52
1	Co 228.616†	-67.3	2.0	0.0387	ug/L	0.0387	ppb	20:27:52
1	Cr 267.716†	85.3	10.5	0.1181	ug/L	0.1181	ppb	20:27:52
1	Cu 324.752†	6064.0	271.2	0.7960	ug/L	0.7960	ppb	20:27:32
1	Mn 257.610†	458.9	31.5	0.0309	ug/L	0.0309	ppb	20:27:52
1	Mo 202.031†	17.9	0.2	0.0105	ug/L	0.0105	ppb	20:27:52
1	Ni 231.604†	105.0	11.0	0.2649	ug/L	0.2649	ppb	20:27:52
1	P 214.914†	220.5	-0.5	-0.4182	ug/L	-0.4182	ppb	20:27:52
1	Pb 220.353†	-61.1	-11.1	-1.3080	ug/L	-1.3080	ppb	20:27:52
1	S 181.975 Axial†	43.3	4.4	5.9431	ug/L	5.9431	ppb	20:27:52
1	Sb 206.836†	44.1	8.1	2.6679	ug/L	2.6679	ppb	20:27:52
1	Se 196.026†	-31.5	-0.5	-0.3691	ug/L	-0.3691	ppb	20:27:52
1	Si 251.611†	540.5	76.7	2.3188	ug/L	2.3188	ppb	20:27:52
1	Sn 189.927†	4.4	-2.8	-0.4736	ug/L	-0.4736	ppb	20:27:52
1	Ti 334.940†	-1354.8	-49.4	-0.0736	ug/L	-0.0736	ppb	20:27:32
1	Tl 190.801†	-21.0	16.5	4.7654	ug/L	4.7654	ppb	20:27:52
1	U 409.014†	-1928.4	-402.3	-11.392	ug/L	-11.392	ppb	20:27:32
1	V 292.402†	-1458.8	-71.2	-0.4871	ug/L	-0.4871	ppb	20:27:32
1	Zn 213.857†	724.4	61.4	0.5515	ug/L	0.5515	ppb	20:27:52
1	SiO2†	532.4	40.3	2.6269	ug/L	2.6269	ppb	20:28:48
2	Sc Radial	5437.6	5437.6	102	%			20:26:40
2	Y RADIAL	5773.2	5773.2	102.3	%			20:26:40
2	Al 396.153Radial†	-4.9	-9.4	-7.5586	ug/L	-7.5586	ppb	20:26:40
2	Ca 317.933Radial†	14.4	-6.4	-10.658	ug/L	-10.658	ppb	20:27:00
2	Fe 238.204 Radial†	12.7	-0.3	-2.9383	ug/L	-2.9383	ppb	20:27:00
2	K 766.490 Radial†	2709.8	-20.7	-4.3678	ug/L	-4.3678	ppb	20:26:40
2	Mg 279.077 IEC†	1.8	-0.9	-29.146	ug/L	-29.146	ppb	20:27:00
2	Na 589.592 Radial†	-1191.8	-68.9	-18.520	ug/L	-18.520	ppb	20:26:40
2	Sr 421.552†	22.8	10.7	0.0685	ug/L	0.0685	ppb	20:26:40
2	Sc 361.383	898764.7	898764.7	95.193	%			20:27:57
2	Y 371.029	793859.9	793859.9	99.560	%			20:27:57
2	Ag 328.068†	389.6	-1.9	-0.0031	ug/L	-0.0031	ppb	20:27:57
2	As 188.979†	-19.7	-1.1	-0.4456	ug/L	-0.4456	ppb	20:28:17
2	B 249.677†	-436.0	69.4	1.5076	ug/L	1.5076	ppb	20:28:17
2	Ba 233.527†	0.7	-19.0	-0.1399	ug/L	-0.1399	ppb	20:28:17
2	Be 313.107†	-4493.5	-189.7	-0.0671	ug/L	-0.0671	ppb	20:27:57
2	Cd 226.502†	-215.1	-9.1	-0.0987	ug/L	-0.0987	ppb	20:28:17
2	Co 228.616†	-77.8	-8.4	-0.1625	ug/L	-0.1625	ppb	20:28:17
2	Cr 267.716†	98.6	23.5	0.2607	ug/L	0.2607	ppb	20:28:17
2	Cu 324.752†	6124.2	266.9	0.7835	ug/L	0.7835	ppb	20:27:57
2	Mn 257.610†	456.1	23.6	0.0258	ug/L	0.0258	ppb	20:28:17
2	Mo 202.031†	22.8	5.1	0.3455	ug/L	0.3455	ppb	20:28:17
2	Ni 231.604†	99.6	4.1	0.0995	ug/L	0.0995	ppb	20:28:17

2	P 214.914†	230.5	7.6	4.1978 ug/L	4.1978 ppb	20:28:17
2	Pb 220.353†	-54.4	-3.4	-0.4048 ug/L	-0.4048 ppb	20:28:17
2	S 181.975 Axial†	40.8	1.4	1.8722 ug/L	1.8722 ppb	20:28:17
2	Sb 206.836†	38.9	2.2	0.7017 ug/L	0.7017 ppb	20:28:17
2	Se 196.026†	-26.6	4.9	3.0122 ug/L	3.0122 ppb	20:28:17
2	Si 251.611†	548.7	79.3	2.3938 ug/L	2.3938 ppb	20:28:17
2	Sn 189.927†	-2.0	-9.5	-1.5986 ug/L	-1.5986 ppb	20:28:17
2	Ti 334.940†	-1303.7	19.2	0.0345 ug/L	0.0345 ppb	20:27:57
2	Tl 190.801†	-32.9	4.2	1.2219 ug/L	1.2219 ppb	20:28:17
2	U 409.014†	-1912.4	-364.1	-10.311 ug/L	-10.311 ppb	20:27:57
2	V 292.402†	-1487.7	-85.3	-0.5760 ug/L	-0.5760 ppb	20:27:57
2	Zn 213.857†	718.1	46.6	0.4187 ug/L	0.4187 ppb	20:28:17
2	SiO2†	581.2	85.6	5.5766 ug/L	5.5766 ppb	20:28:53
3	Sc Radial	5438.9	5438.9	102 %		20:27:05
3	Y RADIAL	5782.5	5782.5	102.4 %		20:27:05
3	Al 396.153Radial†	18.1	13.1	10.508 ug/L	10.508 ppb	20:27:05
3	Ca 317.933Radial†	17.2	-3.8	-6.2415 ug/L	-6.2415 ppb	20:27:25
3	Fe 238.204 Radial†	11.3	-1.8	-15.505 ug/L	-15.505 ppb	20:27:25
3	K 766.490 Radial†	2896.0	161.1	34.082 ug/L	34.082 ppb	20:27:05
3	Mg 279.077 IEC†	2.5	-0.2	-5.3268 ug/L	-5.3268 ppb	20:27:25
3	Na 589.592 Radial†	-1246.4	-122.1	-32.799 ug/L	-32.799 ppb	20:27:05
3	Sr 421.552†	56.6	43.8	0.2803 ug/L	0.2803 ppb	20:27:05
3	Sc 361.383	888892.0	888892.0	94.147 %		20:28:23
3	Y 371.029	784831.6	784831.6	98.428 %		20:28:23
3	Ag 328.068†	394.2	7.5	0.0367 ug/L	0.0367 ppb	20:28:23
3	As 188.979†	-16.0	2.6	1.0340 ug/L	1.0340 ppb	20:28:43
3	B 249.677†	-471.9	26.3	0.5726 ug/L	0.5726 ppb	20:28:43
3	Ba 233.527†	18.0	-0.5	-0.0052 ug/L	-0.0052 ppb	20:28:43
3	Be 313.107†	-4457.4	-203.8	-0.0724 ug/L	-0.0724 ppb	20:28:23
3	Cd 226.502†	-225.1	-22.2	-0.2377 ug/L	-0.2377 ppb	20:28:43
3	Co 228.616†	-67.2	2.0	0.0381 ug/L	0.0381 ppb	20:28:43
3	Cr 267.716†	79.5	4.4	0.0523 ug/L	0.0523 ppb	20:28:43
3	Cu 324.752†	5958.0	161.9	0.4780 ug/L	0.4780 ppb	20:28:23
3	Mn 257.610†	455.4	28.1	0.0284 ug/L	0.0284 ppb	20:28:43
3	Mo 202.031†	11.4	-6.7	-0.4501 ug/L	-0.4501 ppb	20:28:43
3	Ni 231.604†	95.6	1.0	0.0231 ug/L	0.0231 ppb	20:28:43
3	P 214.914†	226.4	5.9	3.3067 ug/L	3.3067 ppb	20:28:43
3	Pb 220.353†	-76.9	-27.9	-3.2789 ug/L	-3.2789 ppb	20:28:43
3	S 181.975 Axial†	41.2	2.2	2.9823 ug/L	2.9823 ppb	20:28:43
3	Sb 206.836†	31.2	-5.6	-1.8418 ug/L	-1.8418 ppb	20:28:43
3	Se 196.026†	-30.0	1.0	0.5680 ug/L	0.5680 ppb	20:28:43
3	Si 251.611†	535.9	72.1	2.1853 ug/L	2.1853 ppb	20:28:43
3	Sn 189.927†	12.3	5.6	0.9402 ug/L	0.9402 ppb	20:28:43
3	Ti 334.940†	-1391.0	-88.6	-0.1291 ug/L	-0.1291 ppb	20:28:23
3	Tl 190.801†	-31.3	5.5	1.5785 ug/L	1.5785 ppb	20:28:43
3	U 409.014†	-1964.7	-441.9	-12.513 ug/L	-12.513 ppb	20:28:23
3	V 292.402†	-1446.6	-59.0	-0.4156 ug/L	-0.4156 ppb	20:28:23
3	Zn 213.857†	701.2	37.1	0.3347 ug/L	0.3347 ppb	20:28:43
3	SiO2†	514.2	21.2	1.3957 ug/L	1.3957 ppb	20:28:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	892334.5	94.512	%	0.5903				0.62%
Sc Radial	5410.3	102	%	0.9				0.89%
Y 371.029	786774.9	98.671	%	0.7952				0.81%
Y RADIAL	5745.4	101.8	%	1.00				0.98%
Ag 328.068†	48.8	0.2188	ug/L	0.35044	0.2188	ppb	0.35044	160.15%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.5	1.2401	ug/L	9.04226	1.2401	ppb	9.04226	729.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-6.1	-2.4686	ug/L	4.84211	-2.4686	ppb	4.84211	196.15%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	49.9	1.0837	ug/L	0.47359	1.0837	ppb	0.47359	43.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-8.4	-0.0629	ug/L	0.06941	-0.0629	ppb	0.06941	110.37%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-211.5	-0.0750	ug/L	0.00949	-0.0750	ppb	0.00949	12.65%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-4.8	-7.9209	ug/L	2.39047	-7.9209	ppb	2.39047	30.18%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -10.4     -0.1118 ug/L       0.11987     -0.1118 ppb        0.11987 107.23%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -1.5     -0.0286 ug/L       0.11596     -0.0286 ppb        0.11596 405.96%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               12.8      0.1437 ug/L       0.10653      0.1437 ppb        0.10653  74.15%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              233.3      0.6858 ug/L       0.18015      0.6858 ppb        0.18015  26.27%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.1     -9.8679 ug/L       6.38220     -9.8679 ppb        6.38220  64.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         84.9      17.980 ug/L       19.9713      17.980 ppb        19.9713 111.08%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.0      0.1429 ug/L      32.37185      0.1429 ppb       32.37185 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               27.7      0.0284 ug/L       0.00251      0.0284 ppb        0.00251   8.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -0.5     -0.0314 ug/L       0.39944     -0.0314 ppb        0.39944 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -113.9     -30.598 ug/L       11.1419     -30.598 ppb        11.1419  36.41%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                5.4      0.1292 ug/L       0.12358      0.1292 ppb        0.12358  95.68%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 4.3      2.3621 ug/L       2.44869      2.3621 ppb        2.44869 103.67%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -14.2     -1.6639 ug/L       1.46974     -1.6639 ppb        1.46974  88.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.7      3.5992 ug/L       2.10439      3.5992 ppb        2.10439  58.47%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                1.6      0.5093 ug/L       2.26103      0.5093 ppb        2.26103 443.99%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                1.8      1.0704 ug/L       1.74570      1.0704 ppb        1.74570 163.09%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               76.0      2.2993 ug/L       0.10562      2.2993 ppb        0.10562   4.59%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -2.2     -0.3773 ug/L       1.27215     -0.3773 ppb        1.27215 337.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               19.5      0.1251 ug/L       0.13606      0.1251 ppb        0.13606 108.79%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -39.6     -0.0561 ug/L       0.08316     -0.0561 ppb        0.08316 148.29%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                8.7      2.5219 ug/L       1.95106      2.5219 ppb        1.95106  77.36%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -402.8     -11.405 ug/L        1.1014     -11.405 ppb         1.1014   9.66%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -71.8     -0.4929 ug/L       0.08039     -0.4929 ppb        0.08039  16.31%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               48.4      0.4350 ug/L       0.10934      0.4350 ppb        0.10934  25.14%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     49.0      3.1997 ug/L       2.14849      3.1997 ppb        2.14849  67.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, January 13, 2010 10:19:43
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.355
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	579.6	579.612	16.411	2.8
	Mg	24.0	12269.1	12269.068	210.941	1.7
	Co	58.9	36537.7	36537.666	164.691	0.5
	Rh	102.9	65339.3	65339.283	235.839	0.4
	In	114.9	87526.9	87526.915	99.299	0.1
	Pb	208.0	35694.7	35694.741	278.763	0.8
⌈>	Ba	137.9	70762.8	70762.834	513.701	0.7
⌊	Ba++	69.0	1332.7	0.019	0.000	1.7
⌈>	Ce	139.9	84088.4	84088.360	491.658	0.6
⌊	CeO	155.9	1887.7	0.022	0.000	1.5
	Bkgd	220.0	7.3	7.300	1.605	22.0

Current Optimization File Data

Current Value	Description
0.84	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.0	756.0
Co	59	21	8.8	25676.4
In	115	21	9.8	66539.9

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	611	2060	0.678
Be	9.0	9.1	2060	2045	0.683
Mg	24.0	24.0	5677	2075	0.629
Mg	25.0	25.0	5939	2080	0.663
Mg	26.0	26.1	6168	2085	0.624
Co	58.9	59.0	14180	2140	0.626
Rh	102.9	102.9	24872	2230	0.631
In	114.9	114.9	27781	2255	0.680
Ce	139.9	139.9	33846	2310	0.645
Pb	206.0	206.0	49945	2500	0.703
Pb	207.0	207.0	50101	2380	0.651
Pb	208.0	208.0	50448	2570	0.648
U	238.1	238.0	57697	2510	0.705

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, January 13, 2010 19:21:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\Blank.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		23	
	Be	9		ug/L		4	
	B	11		ug/L		64	
	Na	23		ug/L		45405	
	Mg	24		ug/L		3334	
	Al	27		ug/L		667	
	P	31		ug/L		2737	
	K	39		ug/L		386846	
	Ca	43		ug/L		403	
>	Sc	45		ug/L		171188	
	Ti	47		ug/L		180	
	V	51		ug/L		-6450	
	Cr	52		ug/L		2248	
	Cr	53		ug/L		148225	
	Mn	55		ug/L		937	
	Fe	57		ug/L		2678	
	Co	59		ug/L		109	
	Ni	60		ug/L		112	
	Cu	63		ug/L		161	
	Cu	65		ug/L		102	
	Zn	66		ug/L		59	
	Zn	67		ug/L		8406	
	Zn	68		ug/L		756	
>	Ge	74		ug/L		117706	
	As	75		ug/L		134	
	Se	77		ug/L		5957	
	Se	82		ug/L		-13	
	Kr	83		ug/L		48	
	Sr	88		ug/L		142	
	Y	89		ug/L		14	
	Zr	90		ug/L		312	
	Mo	98		ug/L		45	
	Ag	107		ug/L		50	
	Cd	111		ug/L		13	
	Cd	114		ug/L		28	
>	In	115		ug/L		75402	
	Sn	120		ug/L		174	
	Sb	121		ug/L		240	
	Sb	123		ug/L		200	
	Ba	135		ug/L		16	
	Ba	137		ug/L		31	
	Ho	165		ug/L		6	
>	Lu	175		ug/L		70103	
	Tl	205		ug/L		59	
	Pb	208		ug/L		391	
	Bi	209		ug/L		14	
	Th	232		ug/L		381	
	U	238		ug/L		196	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Linear Thru Zero	1.0000
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Linear Thru Zero	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Linear Thru Zero	1.0000
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Zr	90	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
Th	232	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, January 13, 2010 19:28:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\Standard 1.129

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	7.049	1356	0.008
	Be	9	10.000	ug/L	2.973	501	0.003
	B	11	20.000	ug/L	1.059	1134	0.006
	Na	23	1000.000	ug/L	4.609	1283177	7.209
	Mg	24	1000.000	ug/L	6.700	826966	4.799
	Al	27	1000.000	ug/L	4.156	1109851	6.461
	P	31	1000.000	ug/L	1.820	63415	0.353
	K	39	1000.000	ug/L	3.392	2520078	12.409
	Ca	43	1000.000	ug/L	2.659	4801	0.026
>	Sc	45		ug/L		171774	171774.297
	Ti	47	10.000	ug/L	3.785	2071	0.011
	V	51	10.000	ug/L	39.074	13455	0.116
	Cr	52	10.000	ug/L	1.430	21193	0.110
	Cr	53		ug/L		165998	0.101
	Mn	55	10.000	ug/L	1.855	30923	0.175
	Fe	57	1000.000	ug/L	2.683	62742	0.350
	Co	59	10.000	ug/L	3.086	22124	0.128
	Ni	60	10.000	ug/L	4.356	5038	0.029
	Cu	63		ug/L		10624	0.061
	Cu	65	10.000	ug/L	2.015	5098	0.029
	Zn	66	10.000	ug/L	1.589	2648	0.022
	Zn	67		ug/L		9620	0.011
	Zn	68		ug/L		2681	0.017
>	Ge	74		ug/L		116432	116432.104
	As	75	10.000	ug/L	3.769	3283	0.027
	Se	77		ug/L		7226	0.011
	Se	82	10.000	ug/L	7.640	263	0.002
	Kr	83		ug/L		40	-0.000
	Sr	88	10.000	ug/L	1.458	45263	0.609
	Y	89		ug/L		16	0.000
	Zr	90	10.000	ug/L	2.817	25195	0.336
	Mo	98	10.000	ug/L	2.752	10443	0.140
	Ag	107	10.000	ug/L	3.111	16902	0.228
	Cd	111	10.000	ug/L	3.745	3959	0.053
	Cd	114		ug/L		9387	0.126
>	In	115		ug/L		74061	74060.838
	Sn	120	10.000	ug/L	3.482	18056	0.242
	Sb	121	10.000	ug/L	2.003	13908	0.185
	Sb	123		ug/L		10573	0.140
	Ba	135		ug/L		4088	0.059
	Ba	137	10.000	ug/L	5.163	7031	0.102
	Ho	165		ug/L		7	0.000
>	Lu	175		ug/L		68808	68807.534
	Tl	205	10.000	ug/L	4.172	6222	0.090
	Pb	208	10.000	ug/L	3.220	44413	0.640
	Bi	209		ug/L		27	0.000
	Th	232	10.000	ug/L	4.756	58313	0.843
	U	238	10.000	ug/L	4.467	62529	0.907

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, January 13, 2010 19:34:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\Standard 2.130

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.918**	**ug/L**	9.833	12561	0.072
	Be	9	**99.993**	**ug/L**	5.448	5030	0.029
	B	11	**199.842**	**ug/L**	3.059	10155	0.058
	Na	23	**9999.822**	**ug/L**	5.160	12636158	71.963
	Mg	24	**10002.377**	**ug/L**	5.599	8608989	49.166
	Al	27	**10007.290**	**ug/L**	3.874	12197218	69.738
	P	31	**9997.380**	**ug/L**	1.277	604833	3.442
	K	39	**10000.154**	**ug/L**	2.606	22136865	124.281
	Ca	43	**9993.388**	**ug/L**	1.918	42401	0.240
>	Sc	45		**ug/L**		174969	174969.476
	Ti	47	**100.022**	**ug/L**	1.232	19887	0.113
	V	51	**99.863**	**ug/L**	0.789	172146	1.022
	Cr	52	**99.933**	**ug/L**	2.186	182904	1.033
	Cr	53		**ug/L**		151655	0.002
	Mn	55	**99.966**	**ug/L**	2.674	296231	1.688
	Fe	57	**9996.381**	**ug/L**	1.691	592967	3.374
	Co	59	**99.952**	**ug/L**	2.291	214061	1.223
	Ni	60	**99.875**	**ug/L**	2.652	44664	0.255
	Cu	63		**ug/L**		99514	0.568
	Cu	65	**99.935**	**ug/L**	1.188	47840	0.273
	Zn	66	**99.956**	**ug/L**	0.802	25306	0.213
	Zn	67		**ug/L**		11681	0.027
	Zn	68		**ug/L**		18577	0.150
>	Ge	74		**ug/L**		118540	118539.647
	As	75	**99.938**	**ug/L**	1.161	30293	0.254
	Se	77		**ug/L**		7091	0.009
	Se	82	**100.022**	**ug/L**	3.995	2852	0.024
	Kr	83		**ug/L**		51	0.000
	Sr	88	**99.975**	**ug/L**	1.537	445915	5.942
	Y	89		**ug/L**		47	0.000
	Zr	90	**99.964**	**ug/L**	0.737	243809	3.246
	Mo	98	**100.001**	**ug/L**	1.064	105592	1.407
	Ag	107	**99.975**	**ug/L**	1.263	166763	2.222
	Cd	111	**99.987**	**ug/L**	1.056	39521	0.527
	Cd	114		**ug/L**		93312	1.243
>	In	115		**ug/L**		75025	75025.040
	Sn	120	**99.985**	**ug/L**	0.437	178855	2.382
	Sb	121	**99.989**	**ug/L**	5.582	137231	1.826
	Sb	123		**ug/L**		105222	1.400
	Ba	135		**ug/L**		40456	0.577
	Ba	137	**99.957**	**ug/L**	1.287	68554	0.977
	Ho	165		**ug/L**		9	0.000
>	Lu	175		**ug/L**		70151	70150.856
	Tl	205	**99.951**	**ug/L**	0.717	60017	0.855
	Pb	208	**99.955**	**ug/L**	0.448	430321	6.129
	Bi	209		**ug/L**		120	0.002
	Th	232	**99.989**	**ug/L**	1.304	585636	8.343
	U	238	**99.959**	**ug/L**	0.351	611308	8.712

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, January 13, 2010 19:40:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 1.131

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.171**	ug/L	6.713	6410	0.037
	Be	9	**52.727**	ug/L	4.047	2638	0.015
	B	11	**106.665**	ug/L	1.775	5417	0.031
	Na	23	**5161.677**	ug/L	9.588	6497017	37.146
	Mg	24	**4866.116**	ug/L	1.452	4161840	23.919
	Al	27	**4928.933**	ug/L	3.947	5972720	34.348
	P	31	**4938.507**	ug/L	0.330	298316	1.700
	K	39	**5378.222**	ug/L	1.826	12011976	66.840
	Ca	43	**4964.010**	ug/L	0.927	21135	0.119
>	Sc	45		ug/L		173847	173846.647
	Ti	47	**50.423**	ug/L	2.158	10054	0.057
	V	51	**46.441**	ug/L	2.029	76035	0.475
	Cr	52	**51.523**	ug/L	1.728	94819	0.532
	Cr	53		ug/L		164187	0.079
	Mn	55	**51.421**	ug/L	1.739	151898	0.868
	Fe	57	**4965.797**	ug/L	1.376	294082	1.676
	Co	59	**50.105**	ug/L	1.330	106701	0.613
	Ni	60	**52.164**	ug/L	0.787	23241	0.133
	Cu	63		ug/L		50483	0.289
	Cu	65	**50.420**	ug/L	0.679	24039	0.138
	Zn	66	**51.376**	ug/L	1.355	12998	0.109
	Zn	67		ug/L		10666	0.019
	Zn	68		ug/L		10134	0.079
>	Ge	74		ug/L		118209	118209.302
	As	75	**50.142**	ug/L	0.634	15225	0.128
	Se	77		ug/L		7367	0.012
	Se	82	**50.473**	ug/L	2.134	1429	0.012
	Kr	83		ug/L		52	0.000
	Sr	88	**50.723**	ug/L	0.911	226926	3.015
	Y	89		ug/L		28	0.000
	Zr	90	**48.316**	ug/L	0.702	118325	1.569
	Mo	98	**48.721**	ug/L	1.356	51610	0.685
	Ag	107	**50.672**	ug/L	0.833	84781	1.126
	Cd	111	**51.304**	ug/L	1.485	20340	0.270
	Cd	114		ug/L		47484	0.631
>	In	115		ug/L		75227	75227.491
	Sn	120	**50.480**	ug/L	0.276	90628	1.202
	Sb	121	**50.954**	ug/L	2.271	70246	0.931
	Sb	123		ug/L		53872	0.713
	Ba	135		ug/L		20045	0.287
	Ba	137	**51.163**	ug/L	0.516	34897	0.500
	Ho	165		ug/L		7	0.000
>	Lu	175		ug/L		69738	69737.857
	Tl	205	**48.655**	ug/L	1.052	29071	0.416
	Pb	208	**51.700**	ug/L	1.029	221431	3.170
	Bi	209		ug/L		50	0.001
	Th	232	**51.575**	ug/L	0.543	300486	4.304
	U	238	**52.924**	ug/L	0.718	321828	4.612

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.342				
	Be	9	105.455				
	B	11	106.665				
	Na	23	103.234				
	Mg	24	97.322				
	Al	27	97.603				
	P	31	98.770				
	K	39	107.564				
	Ca	43	99.280				
>	Sc	45		101.6			
	Ti	47	100.845				
	V	51	92.881				
	Cr	52	103.046				
	Cr	53					
	Mn	55	102.842				
	Fe	57	99.316				
	Co	59	100.209				
	Ni	60	104.328				
	Cu	63					
	Cu	65	100.839				
	Zn	66	102.753				
	Zn	67					
	Zn	68					
>	Ge	74		100.4			
	As	75	100.283				
	Se	77					
	Se	82	100.947				
	Kr	83					
	Sr	88	101.445				
	Y	89					
	Zr	90	96.632				
	Mo	98	97.442				
	Ag	107	101.345				
	Cd	111	102.608				
	Cd	114					
>	In	115		99.8			
	Sn	120	100.960				
	Sb	121	101.908				
	Sb	123					
	Ba	135					
	Ba	137	102.326				
	Ho	165					
>	Lu	175		99.5			
	Tl	205	97.310				
	Pb	208	103.400				
	Bi	209					
	Th	232	103.151				
	U	238	105.847				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, January 13, 2010 19:46:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 2.132

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.010**	ug/L	224.475	22	-0.000
	Be	9	**0.006**	ug/L	831.255	4	0.000
	B	11	**3.787**	ug/L	18.168	253	0.001
	Na	23	**-4.167**	ug/L	240.649	40728	-0.030
	Mg	24	**-1.602**	ug/L	74.074	2000	-0.008
	Al	27	**0.823**	ug/L	57.183	1667	0.006
	P	31	**-1.523**	ug/L	167.225	2672	-0.001
	K	39	**11.831**	ug/L	12.347	415970	0.147
	Ca	43	**-3.840**	ug/L	257.183	391	-0.000
>	Sc	45		ug/L		172824	172823.554
	Ti	47	**-0.091**	ug/L	41.368	164	-0.000
	V	51	**-0.508**	ug/L	353.580	-7390	-0.005
	Cr	52	**-0.133**	ug/L	63.565	2032	-0.001
	Cr	53		ug/L		146921	-0.016
	Mn	55	**-0.013**	ug/L	72.312	907	-0.000
	Fe	57	**2.102**	ug/L	59.619	2826	0.001
	Co	59	**0.009**	ug/L	33.546	130	0.000
	Ni	60	**0.017**	ug/L	196.861	120	0.000
	Cu	63		ug/L		177	0.000
	Cu	65	**-0.011**	ug/L	149.214	98	-0.000
	Zn	66	**0.050**	ug/L	88.495	72	0.000
	Zn	67		ug/L		8346	-0.001
	Zn	68		ug/L		747	-0.000
>	Ge	74		ug/L		118121	118121.256
	As	75	**0.523**	ug/L	185.514	292	0.001
	Se	77		ug/L		5855	-0.001
	Se	82	**0.189**	ug/L	277.096	-7	0.000
	Kr	83		ug/L		45	-0.000
	Sr	88	**0.008**	ug/L	27.144	178	0.000
	Y	89		ug/L		15	0.000
	Zr	90	**0.111**	ug/L	18.552	588	0.004
	Mo	98	**0.031**	ug/L	67.341	78	0.000
	Ag	107	**0.024**	ug/L	26.254	90	0.001
	Cd	111	**0.010**	ug/L	41.463	17	0.000
	Cd	114		ug/L		34	0.000
>	In	115		ug/L		76021	76020.535
	Sn	120	**0.198**	ug/L	11.365	534	0.005
	Sb	121	**0.905**	ug/L	11.897	1498	0.017
	Sb	123		ug/L		1158	0.013
	Ba	135		ug/L		17	0.000
	Ba	137	**-0.006**	ug/L	214.373	26	-0.000
	Ho	165		ug/L		7	0.000
>	Lu	175		ug/L		69139	69139.315
	Tl	205	**0.091**	ug/L	26.408	112	0.001
	Pb	208	**-0.002**	ug/L	395.828	379	-0.000
	Bi	209		ug/L		18	0.000
	Th	232	**0.136**	ug/L	27.793	1162	0.011
	U	238	**0.006**	ug/L	49.911	228	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			101.0		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			100.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.6		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, January 13, 2010 19:52:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 3.133

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.573**	ug/L	7.915	1462	0.008
	Be	9	**0.561**	ug/L	22.045	32	0.000
	B	11	**18.097**	ug/L	3.493	969	0.005
	Na	23	**308.970**	ug/L	17.542	431186	2.223
	Mg	24	**10.137**	ug/L	22.491	12005	0.050
	Al	27	**31.227**	ug/L	22.527	38387	0.218
	P	31	**53.890**	ug/L	4.153	5981	0.019
	K	39	**313.944**	ug/L	10.728	1066461	3.902
	Ca	43	**223.336**	ug/L	1.500	1337	0.005
>	Sc	45		ug/L		173145	173144.718
	Ti	47	**9.099**	ug/L	1.017	1956	0.010
	V	51	**8.413**	ug/L	60.352	8337	0.086
	Cr	52	**11.098**	ug/L	0.781	22128	0.115
	Cr	53		ug/L		172783	0.132
	Mn	55	**5.715**	ug/L	1.730	17660	0.097
	Fe	57	**113.672**	ug/L	4.062	9353	0.038
	Co	59	**1.104**	ug/L	2.075	2449	0.014
	Ni	60	**2.934**	ug/L	6.605	1408	0.007
	Cu	63		ug/L		1582	0.008
	Cu	65	**1.372**	ug/L	1.202	752	0.004
	Zn	66	**11.421**	ug/L	2.942	2938	0.024
	Zn	67		ug/L		10016	0.013
	Zn	68		ug/L		2810	0.017
>	Ge	74		ug/L		118324	118324.199
	As	75	**7.295**	ug/L	25.091	2332	0.019
	Se	77		ug/L		7444	0.012
	Se	82	**4.579**	ug/L	12.213	118	0.001
	Kr	83		ug/L		54	0.000
	Sr	88	**10.915**	ug/L	0.822	49477	0.649
	Y	89		ug/L		13	-0.000
	Zr	90	**2.026**	ug/L	0.967	5318	0.066
	Mo	98	**0.510**	ug/L	4.170	591	0.007
	Ag	107	**1.036**	ug/L	1.060	1801	0.023
	Cd	111	**1.107**	ug/L	2.484	456	0.006
	Cd	114		ug/L		1032	0.013
>	In	115		ug/L		76053	76052.887
	Sn	120	**5.404**	ug/L	1.481	9967	0.129
	Sb	121	**3.399**	ug/L	2.670	4963	0.062
	Sb	123		ug/L		3858	0.048
	Ba	135		ug/L		885	0.012
	Ba	137	**2.151**	ug/L	6.200	1495	0.021
	Ho	165		ug/L		4	-0.000
>	Lu	175		ug/L		69679	69678.885
	Tl	205	**1.081**	ug/L	4.529	703	0.009
	Pb	208	**2.210**	ug/L	0.929	9833	0.136
	Bi	209		ug/L		19	0.000
	Th	232	**1.103**	ug/L	0.551	6789	0.092
	U	238	**0.206**	ug/L	3.821	1446	0.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	115.729				
Be	9	112.280				
B	11	120.647				
Na	23	123.588				
Mg	24	67.582				
Al	27	104.091				
P	31	107.779				
K	39	104.648				
Ca	43	111.668				
> Sc	45		101.1			
Ti	47	90.987				
V	51	84.131				
Cr	52	110.979				
Cr	53					
Mn	55	114.302				
Fe	57	113.672				
Co	59	110.359				
Ni	60	146.677				
Cu	63					
Cu	65	137.165				
Zn	66	114.206				
Zn	67					
Zn	68					
> Ge	74		100.5			
As	75	145.891				
Se	77					
Se	82	91.579				
Kr	83					
Sr	88	109.147				
Y	89					
Zr	90	101.319				
Mo	98	101.966				
Ag	107	103.608				
Cd	111	110.736				
Cd	114					
> In	115		100.9			
Sn	120	108.086				
Sb	121	113.286				
Sb	123					
Ba	135					
Ba	137	107.550				
Ho	165					
> Lu	175		99.4			
Tl	205	108.123				
Pb	208	110.521				
Bi	209					
Th	232	110.255				
U	238	102.996				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Mg	24	CRDL is out of limits
QC Std 3	Ni	60	CRDL is out of limits
QC Std 3	Cu	65	CRDL is out of limits
QC Std 3	As	75	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, January 13, 2010 19:58:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 4.134

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.095**	ug/L	52.009	34	0.000
	Be	9	**0.065**	ug/L	56.739	7	0.000
	B	11	**1.617**	ug/L	15.979	139	0.000
	Na	23	**96500.456**	ug/L	3.132	115442745	694.462
	Mg	24	**94117.105**	ug/L	2.993	76891962	462.629
	Al	27	**94627.539**	ug/L	3.143	109573540	659.429
	P	31	**97458.432**	ug/L	0.507	5578202	33.549
	K	39	**91707.879**	ug/L	2.670	189814180	1139.738
	Ca	43	**95800.771**	ug/L	0.961	382775	2.301
>	Sc	45		ug/L		166189	166188.760
	Ti	47	**1432.877**	ug/L	2.230	268345	1.614
	V	51	**-1.594**	ug/L	291.915	-8954	-0.016
	Cr	52	**3.082**	ug/L	2.974	7474	0.032
	Cr	53		ug/L		121975	-0.132
	Mn	55	**5.629**	ug/L	0.449	16709	0.095
	Fe	57	**97973.241**	ug/L	0.948	5498500	33.071
	Co	59	**0.300**	ug/L	7.694	716	0.004
	Ni	60	**4.539**	ug/L	3.122	2032	0.012
	Cu	63		ug/L		2259	0.013
	Cu	65	**3.161**	ug/L	2.396	1534	0.009
	Zn	66	**4.692**	ug/L	4.622	1152	0.010
	Zn	67		ug/L		7074	-0.007
	Zn	68		ug/L		844	0.001
>	Ge	74		ug/L		109787	109787.022
	As	75	**1.182**	ug/L	116.275	457	0.003
	Se	77		ug/L		5141	-0.004
	Se	82	**-0.699**	ug/L	78.458	-30	-0.000
	Kr	83		ug/L		82	0.000
	Sr	88	**1.126**	ug/L	0.932	4837	0.067
	Y	89		ug/L		146	0.002
	Zr	90	**0.532**	ug/L	48.615	1506	0.017
	Mo	98	**1905.827**	ug/L	1.793	1885372	26.812
	Ag	107	**0.056**	ug/L	21.244	134	0.001
	Cd	111	**0.520**	ug/L	8.346	204	0.003
	Cd	114		ug/L		2514	0.035
>	In	115		ug/L		70330	70329.672
	Sn	120	**0.135**	ug/L	13.143	389	0.003
	Sb	121	**0.191**	ug/L	5.056	469	0.003
	Sb	123		ug/L		360	0.002
	Ba	135		ug/L		289	0.004
	Ba	137	**0.608**	ug/L	5.927	440	0.006
	Ho	165		ug/L		195	0.003
>	Lu	175		ug/L		68931	68930.922
	Tl	205	**0.006**	ug/L	221.033	62	0.000
	Pb	208	**0.172**	ug/L	7.739	1111	0.011
	Bi	209		ug/L		144	0.002
	Th	232	**0.077**	ug/L	35.746	815	0.006
	U	238	**-0.025**	ug/L	4.379	42	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	96.500				
	Mg	24	94.117				
	Al	27	94.628				
	P	31	97.458				
	K	39	91.708				
	Ca	43	95.801				
>	Sc	45			97.1		
	Ti	47	71.644				
	V	51					
	Cr	52	83.285				
	Cr	53					
	Mn	55	97.055				
	Fe	57	97.973				
	Co	59	119.924				
	Ni	60	168.099				
	Cu	63					
	Cu	65	109.013				
	Zn	66	130.336				
	Zn	67					
	Zn	68					
>	Ge	74			93.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	93.795				
	Y	89					
	Zr	90					
	Mo	98	95.291				
	Ag	107					
	Cd	111	130.067				
	Cd	114					
>	In	115			93.3		
	Sn	120					
	Sb	121	191.057				
	Sb	123					
	Ba	135					
	Ba	137	90.736				
	Ho	165					
>	Lu	175			98.3		
	Tl	205					
	Pb	208	85.989				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, January 13, 2010 20:05:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 5.135

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**21.453**	ug/L	9.177	2472	0.015
	Be	9	**21.695**	ug/L	0.822	996	0.006
	B	11	**22.388**	ug/L	2.182	1087	0.006
	Na	23	**100391.618**	ug/L	0.799	114981589	722.465
	Mg	24	**103235.573**	ug/L	1.709	80744936	507.450
	Al	27	**94613.035**	ug/L	4.509	104918455	659.328
	P	31	**101177.319**	ug/L	0.242	5543901	34.829
	K	39	**96292.618**	ug/L	0.823	190765153	1196.717
	Ca	43	**98009.796**	ug/L	0.528	374893	2.354
>	Sc	45		ug/L		159099	159098.992
	Ti	47	**1489.868**	ug/L	0.478	267083	1.678
	V	51	**15.224**	ug/L	17.597	18797	0.156
	Cr	52	**23.186**	ug/L	0.475	40206	0.240
	Cr	53		ug/L		147245	0.060
	Mn	55	**25.547**	ug/L	0.821	69513	0.431
	Fe	57	**99629.301**	ug/L	1.534	5352810	33.630
	Co	59	**19.572**	ug/L	0.531	38209	0.240
	Ni	60	**23.224**	ug/L	0.396	9527	0.059
	Cu	63		ug/L		18921	0.118
	Cu	65	**21.441**	ug/L	1.402	9409	0.059
	Zn	66	**23.500**	ug/L	0.873	5411	0.050
	Zn	67		ug/L		8948	0.012
	Zn	68		ug/L		3939	0.030
>	Ge	74		ug/L		107004	107003.656
	As	75	**21.499**	ug/L	7.027	5977	0.055
	Se	77		ug/L		7267	0.017
	Se	82	**19.944**	ug/L	6.227	504	0.005
	Kr	83		ug/L		100	0.001
	Sr	88	**21.982**	ug/L	2.307	87522	1.306
	Y	89		ug/L		145	0.002
	Zr	90	**21.337**	ug/L	1.686	46617	0.693
	Mo	98	**1987.453**	ug/L	1.522	1870347	27.960
	Ag	107	**19.466**	ug/L	1.358	28987	0.433
	Cd	111	**20.206**	ug/L	3.034	7129	0.106
	Cd	114		ug/L		19077	0.285
>	In	115		ug/L		66901	66901.214
	Sn	120	**20.780**	ug/L	1.243	33265	0.495
	Sb	121	**22.717**	ug/L	1.087	27965	0.415
	Sb	123		ug/L		21719	0.322
	Ba	135		ug/L		7475	0.110
	Ba	137	**19.446**	ug/L	1.297	12869	0.190
	Ho	165		ug/L		199	0.003
>	Lu	175		ug/L		67566	67565.744
	Tl	205	**17.580**	ug/L	1.326	10214	0.150
	Pb	208	**18.976**	ug/L	1.053	78988	1.163
	Bi	209		ug/L		186	0.003
	Th	232	**19.827**	ug/L	0.441	112148	1.654
	U	238	**20.249**	ug/L	0.885	119424	1.765

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	107.263				
	Be	9	108.477				
	B	11	111.939				
	Na	23	100.392				
	Mg	24	103.236				
	Al	27	94.613				
	P	31	101.177				
	K	39	96.293				
	Ca	43	98.010				
>	Sc	45			92.9		
	Ti	47	74.493				
	V	51	76.120				
	Cr	52	97.831				
	Cr	53					
	Mn	55	99.021				
	Fe	57	99.629				
	Co	59	96.652				
	Ni	60	102.309				
	Cu	63					
	Cu	65	93.631				
	Zn	66	99.576				
	Zn	67					
	Zn	68					
>	Ge	74			90.9		
	As	75	107.494				
	Se	77					
	Se	82	99.721				
	Kr	83					
	Sr	88	103.688				
	Y	89					
	Zr	90	106.685				
	Mo	98	99.373				
	Ag	107	97.329				
	Cd	111	99.048				
	Cd	114					
>	In	115			88.7		
	Sn	120	103.900				
	Sb	121	113.019				
	Sb	123					
	Ba	135					
	Ba	137	94.077				
	Ho	165					
>	Lu	175			96.4		
	Tl	205	87.901				
	Pb	208	93.940				
	Bi	209					
	Th	232	99.135				
	U	238	101.244				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	Ti	47ICSAB is out of limits
QC Std 5	V	51ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 20:11:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 6.136

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.866**	ug/L	7.376	6555	0.039
	Be	9	**55.065**	ug/L	2.109	2628	0.016
	B	11	**104.388**	ug/L	1.878	5057	0.030
	Na	23	**5369.063**	ug/L	4.152	6446578	38.638
	Mg	24	**5263.713**	ug/L	3.048	4292716	25.874
	Al	27	**4907.440**	ug/L	4.568	5667790	34.198
	P	31	**5080.341**	ug/L	1.115	292532	1.749
	K	39	**5055.241**	ug/L	13.532	10796514	62.826
	Ca	43	**5052.050**	ug/L	1.400	20507	0.121
>	Sc	45		ug/L		165765	165765.275
	Ti	47	**51.846**	ug/L	2.488	9850	0.058
	V	51	**51.326**	ug/L	1.084	80791	0.525
	Cr	52	**51.299**	ug/L	0.717	90037	0.530
	Cr	53		ug/L		157818	0.086
	Mn	55	**51.877**	ug/L	2.084	146140	0.876
	Fe	57	**5070.616**	ug/L	2.524	286275	1.712
	Co	59	**49.990**	ug/L	2.050	101505	0.612
	Ni	60	**53.057**	ug/L	1.927	22537	0.135
	Cu	63		ug/L		48664	0.293
	Cu	65	**50.687**	ug/L	2.503	23039	0.138
	Zn	66	**51.467**	ug/L	0.683	12521	0.110
	Zn	67		ug/L		10296	0.019
	Zn	68		ug/L		9482	0.077
>	Ge	74		ug/L		113662	113661.530
	As	75	**47.835**	ug/L	1.493	13972	0.122
	Se	77		ug/L		7341	0.014
	Se	82	**51.211**	ug/L	4.920	1395	0.012
	Kr	83		ug/L		46	-0.000
	Sr	88	**50.357**	ug/L	1.235	219383	2.993
	Y	89		ug/L		25	0.000
	Zr	90	**47.401**	ug/L	0.811	113045	1.539
	Mo	98	**48.625**	ug/L	2.019	50153	0.684
	Ag	107	**48.476**	ug/L	0.990	78989	1.077
	Cd	111	**50.201**	ug/L	2.426	19379	0.264
	Cd	114		ug/L		45422	0.620
>	In	115		ug/L		73259	73258.648
	Sn	120	**49.701**	ug/L	0.539	86896	1.184
	Sb	121	**49.830**	ug/L	2.982	66904	0.910
	Sb	123		ug/L		50703	0.689
	Ba	135		ug/L		19452	0.282
	Ba	137	**49.336**	ug/L	1.134	33283	0.482
	Ho	165		ug/L		9	0.000
>	Lu	175		ug/L		68967	68967.105
	Tl	205	**47.862**	ug/L	1.037	28285	0.409
	Pb	208	**50.743**	ug/L	0.781	214953	3.111
	Bi	209		ug/L		54	0.001
	Th	232	**50.585**	ug/L	1.016	291460	4.221
	U	238	**52.319**	ug/L	1.284	314635	4.560

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	109.732				
	Be	9	110.131				
	B	11	104.388				
	Na	23	107.381				
	Mg	24	105.274				
	Al	27	97.177				
	P	31	101.607				
	K	39	101.105				
	Ca	43	101.041				
>	Sc	45		96.8			
	Ti	47	103.691				
	V	51	102.653				
	Cr	52	102.598				
	Cr	53					
	Mn	55	103.753				
	Fe	57	101.412				
	Co	59	99.979				
	Ni	60	106.113				
	Cu	63					
	Cu	65	101.375				
	Zn	66	102.934				
	Zn	67					
	Zn	68					
>	Ge	74		96.6			
	As	75	95.669				
	Se	77					
	Se	82	102.423				
	Kr	83					
	Sr	88	100.715				
	Y	89					
	Zr	90	94.802				
	Mo	98	97.250				
	Ag	107	96.951				
	Cd	111	100.401				
	Cd	114					
>	In	115		97.2			
	Sn	120	99.402				
	Sb	121	99.660				
	Sb	123					
	Ba	135					
	Ba	137	98.672				
	Ho	165					
>	Lu	175		98.4			
	Tl	205	95.724				
	Pb	208	101.487				
	Bi	209					
	Th	232	101.170				
	U	238	104.637				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 20:17:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 7.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.001	ug/L	3009.855	22	-0.000
	Be	9	0.003	ug/L	2303.870	4	0.000
	B	11	2.116	ug/L	21.891	162	0.001
	Na	23	1.677	ug/L	301.324	45741	0.012
	Mg	24	1.379	ug/L	185.310	4334	0.007
	Al	27	1.173	ug/L	147.141	2000	0.008
	P	31	-4.321	ug/L	37.306	2390	-0.001
	K	39	-2.859	ug/L	347.332	366656	-0.036
	Ca	43	-6.216	ug/L	321.295	363	-0.000
>	Sc	45		ug/L		164835	164835.199
	Ti	47	0.222	ug/L	30.869	214	0.000
	V	51	-1.130	ug/L	171.155	-8104	-0.012
	Cr	52	-0.227	ug/L	27.151	1778	-0.002
	Cr	53		ug/L		139520	-0.019
	Mn	55	-0.019	ug/L	39.100	850	-0.000
	Fe	57	0.433	ug/L	534.784	2603	0.000
	Co	59	0.002	ug/L	221.351	109	0.000
	Ni	60	0.026	ug/L	50.971	119	0.000
	Cu	63		ug/L		175	0.000
	Cu	65	0.014	ug/L	132.957	104	0.000
	Zn	66	0.065	ug/L	56.959	72	0.000
	Zn	67		ug/L		7778	-0.003
	Zn	68		ug/L		669	-0.001
>	Ge	74		ug/L		113191	113191.493
	As	75	0.539	ug/L	261.875	287	0.001
	Se	77		ug/L		5644	-0.001
	Se	82	0.410	ug/L	122.009	-1	0.000
	Kr	83		ug/L		43	-0.000
	Sr	88	0.005	ug/L	110.655	159	0.000
	Y	89		ug/L		15	0.000
	Zr	90	0.109	ug/L	34.326	559	0.004
	Mo	98	0.125	ug/L	15.380	172	0.002
	Ag	107	0.018	ug/L	16.680	78	0.000
	Cd	111	0.011	ug/L	177.946	17	0.000
	Cd	114		ug/L		32	0.000
>	In	115		ug/L		73060	73059.899
	Sn	120	0.120	ug/L	14.357	377	0.003
	Sb	121	0.568	ug/L	16.324	988	0.010
	Sb	123		ug/L		838	0.009
	Ba	135		ug/L		22	0.000
	Ba	137	-0.008	ug/L	26.749	25	-0.000
	Ho	165		ug/L		6	0.000
>	Lu	175		ug/L		68586	68585.948
	Tl	205	0.163	ug/L	25.364	153	0.001
	Pb	208	-0.001	ug/L	194.754	376	-0.000
	Bi	209		ug/L		14	-0.000
	Th	232	0.086	ug/L	28.482	865	0.007
	U	238	0.004	ug/L	149.214	216	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		96.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Wednesday, January 13, 2010 20:23:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 10.138

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**990.022**	ug/L	8.717	114491	0.711
	Be	9	**1021.902**	ug/L	4.581	47313	0.294
	B	11	**1.659**	ug/L	7.668	137	0.000
	Na	23	**50223.155**	ug/L	2.515	58259388	361.429
	Mg	24	**46119.180**	ug/L	3.045	36519494	226.697
	Al	27	**48002.484**	ug/L	1.840	53891561	334.514
	P	31	**23913.550**	ug/L	1.246	1328583	8.232
	K	39	**47205.962**	ug/L	3.507	94907090	586.672
	Ca	43	**48581.164**	ug/L	0.626	188358	1.167
>	Sc	45		ug/L		161098	161097.634
	Ti	47	**38.672**	ug/L	2.120	7185	0.044
	V	51	**1011.922**	ug/L	0.504	1661564	10.352
	Cr	52	**938.223**	ug/L	0.606	1563784	9.694
	Cr	53		ug/L		320848	1.126
	Mn	55	**978.858**	ug/L	0.863	2664306	16.532
	Fe	57	**49331.970**	ug/L	0.488	2685034	16.652
	Co	59	**902.216**	ug/L	1.330	1778674	11.042
	Ni	60	**928.237**	ug/L	0.741	381460	2.367
	Cu	63		ug/L		836411	5.191
	Cu	65	**912.598**	ug/L	1.091	401506	2.492
	Zn	66	**2399.641**	ug/L	1.905	548026	5.113
	Zn	67		ug/L		92716	0.794
	Zn	68		ug/L		382203	3.559
>	Ge	74		ug/L		107191	107191.432
	As	75	**934.285**	ug/L	0.420	255063	2.378
	Se	77		ug/L		14910	0.089
	Se	82	**496.179**	ug/L	0.604	12841	0.120
	Kr	83		ug/L		63	0.000
	Sr	88	**1019.753**	ug/L	0.616	4130539	60.609
	Y	89		ug/L		137	0.002
	Zr	90	**498.287**	ug/L	0.534	1102842	16.178
	Mo	98	**982.720**	ug/L	0.505	942208	13.825
	Ag	107	**237.712**	ug/L	1.120	360129	5.284
	Cd	111	**983.766**	ug/L	0.882	353118	5.181
	Cd	114		ug/L		830994	12.194
>	In	115		ug/L		68149	68148.934
	Sn	120	**995.174**	ug/L	0.413	1615624	23.705
	Sb	121	**252.692**	ug/L	4.009	314700	4.615
	Sb	123		ug/L		240630	3.528
	Ba	135		ug/L		361176	5.363
	Ba	137	**935.602**	ug/L	1.448	615819	9.143
	Ho	165		ug/L		69	0.001
>	Lu	175		ug/L		67356	67355.762
	Tl	205	**472.600**	ug/L	0.374	272255	4.041
	Pb	208	**4900.196**	ug/L	0.641	20237009	300.451
	Bi	209		ug/L		461	0.007
	Th	232	**2466.472**	ug/L	0.844	13861962	205.806
	U	238	**5066.639**	ug/L	2.067	29738944	441.562

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	99.002				
	Be	9	102.190				
	B	11					
	Na	23	100.446				
	Mg	24	92.238				
	Al	27	96.005				
	P	31	95.654				
	K	39	94.412				
	Ca	43	97.162				
>	Sc	45		94.1			
	Ti	47					
	V	51	101.192				
	Cr	52	93.822				
	Cr	53					
	Mn	55	97.886				
	Fe	57	98.664				
	Co	59	90.222				
	Ni	60	92.824				
	Cu	63					
	Cu	65	91.260				
	Zn	66	95.986				
	Zn	67					
	Zn	68					
>	Ge	74		91.1			
	As	75	93.429				
	Se	77					
	Se	82	99.236				
	Kr	83					
	Sr	88	101.975				
	Y	89					
	Zr	90	99.657				
	Mo	98	98.272				
	Ag	107	95.085				
	Cd	111	98.377				
	Cd	114					
>	In	115		90.4			
	Sn	120	99.517				
	Sb	121	101.077				
	Sb	123					
	Ba	135					
	Ba	137	93.560				
	Ho	165					
>	Lu	175		96.1			
	Tl	205	94.520				
	Pb	208	98.004				
	Bi	209					
	Th	232	98.659				
	U	238	101.333				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Wednesday, January 13, 2010 20:29:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 11.139

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.743**	ug/L	8.543	6266	0.038
	Be	9	**52.058**	ug/L	4.345	2471	0.015
	B	11	**103.824**	ug/L	2.412	5005	0.030
	Na	23	**4968.942**	ug/L	6.213	5939787	35.759
	Mg	24	**5299.030**	ug/L	3.044	4297951	26.047
	Al	27	**5010.179**	ug/L	3.317	5760108	34.914
	P	31	**4968.102**	ug/L	1.114	284729	1.710
	K	39	**4688.240**	ug/L	2.712	9982243	58.265
	Ca	43	**4881.628**	ug/L	0.954	19724	0.117
>	Sc	45		ug/L		164926	164926.033
	Ti	47	**50.116**	ug/L	1.144	9481	0.056
	V	51	**49.967**	ug/L	1.732	78074	0.511
	Cr	52	**51.502**	ug/L	1.093	89922	0.532
	Cr	53		ug/L		155769	0.079
	Mn	55	**51.943**	ug/L	1.853	145558	0.877
	Fe	57	**5042.405**	ug/L	2.121	283245	1.702
	Co	59	**50.356**	ug/L	2.207	101723	0.616
	Ni	60	**52.655**	ug/L	0.692	22254	0.134
	Cu	63		ug/L		48810	0.295
	Cu	65	**51.766**	ug/L	2.454	23406	0.141
	Zn	66	**53.679**	ug/L	2.314	12879	0.114
	Zn	67		ug/L		10360	0.021
	Zn	68		ug/L		9659	0.080
>	Ge	74		ug/L		112128	112128.145
	As	75	**47.731**	ug/L	1.933	13752	0.122
	Se	77		ug/L		6892	0.011
	Se	82	**50.555**	ug/L	2.198	1358	0.012
	Kr	83		ug/L		50	0.000
	Sr	88	**50.929**	ug/L	1.295	219652	3.027
	Y	89		ug/L		21	0.000
	Zr	90	**50.840**	ug/L	4.132	119954	1.651
	Mo	98	**48.580**	ug/L	1.606	49608	0.683
	Ag	107	**50.009**	ug/L	0.839	80665	1.112
	Cd	111	**50.615**	ug/L	0.676	19349	0.267
	Cd	114		ug/L		46069	0.635
>	In	115		ug/L		72534	72534.473
	Sn	120	**53.007**	ug/L	2.141	91721	1.263
	Sb	121	**53.376**	ug/L	1.032	70930	0.975
	Sb	123		ug/L		54116	0.743
	Ba	135		ug/L		19618	0.285
	Ba	137	**49.749**	ug/L	2.091	33484	0.486
	Ho	165		ug/L		9	0.000
>	Lu	175		ug/L		68826	68825.772
	Tl	205	**49.868**	ug/L	1.034	29405	0.426
	Pb	208	**51.972**	ug/L	2.286	219667	3.187
	Bi	209		ug/L		52	0.001
	Th	232	**52.361**	ug/L	1.894	301025	4.369
	U	238	**53.910**	ug/L	1.507	323513	4.698

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	105.487				
	Be	9	104.117				
	B	11	103.824				
	Na	23	99.379				
	Mg	24	105.981				
	Al	27	99.211				
	P	31	99.362				
	K	39	93.765				
	Ca	43	97.633				
>	Sc	45			96.3		
	Ti	47	100.231				
	V	51	99.935				
	Cr	52	103.005				
	Cr	53					
	Mn	55	103.886				
	Fe	57	100.848				
	Co	59	100.712				
	Ni	60	105.309				
	Cu	63					
	Cu	65	103.531				
	Zn	66	107.358				
	Zn	67					
	Zn	68					
>	Ge	74			95.3		
	As	75	95.461				
	Se	77					
	Se	82	101.110				
	Kr	83					
	Sr	88	101.857				
	Y	89					
	Zr	90	101.680				
	Mo	98	97.159				
	Ag	107	100.017				
	Cd	111	101.231				
	Cd	114					
>	In	115			96.2		
	Sn	120	106.014				
	Sb	121	106.752				
	Sb	123					
	Ba	135					
	Ba	137	99.498				
	Ho	165					
>	Lu	175			98.2		
	Tl	205	99.736				
	Pb	208	103.943				
	Bi	209					
	Th	232	104.722				
	U	238	107.821				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Wednesday, January 13, 2010 20:36:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 12.140

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.123**	ug/L	25.511	37	0.000
	Be	9	**0.010**	ug/L	314.225	4	0.000
	B	11	**2.404**	ug/L	22.693	175	0.001
	Na	23	**-9.325**	ug/L	65.039	32705	-0.067
	Mg	24	**0.148**	ug/L	1249.485	3334	0.001
	Al	27	**1.488**	ug/L	92.060	2334	0.010
	P	31	**-5.267**	ug/L	18.315	2335	-0.002
	K	39	**4.881**	ug/L	254.105	382052	0.061
	Ca	43	**-6.231**	ug/L	86.536	363	-0.000
>	Sc	45		ug/L		164728	164728.080
	Ti	47	**-0.014**	ug/L	554.657	170	-0.000
	V	51	**-0.331**	ug/L	1101.839	-6804	-0.003
	Cr	52	**-0.273**	ug/L	2.201	1697	-0.003
	Cr	53		ug/L		134646	-0.048
	Mn	55	**-0.018**	ug/L	116.210	850	-0.000
	Fe	57	**-1.146**	ug/L	118.031	2513	-0.000
	Co	59	**0.015**	ug/L	12.503	136	0.000
	Ni	60	**0.026**	ug/L	142.226	118	0.000
	Cu	63		ug/L		197	0.000
	Cu	65	**0.050**	ug/L	64.001	121	0.000
	Zn	66	**0.218**	ug/L	31.491	108	0.000
	Zn	67		ug/L		7646	-0.003
	Zn	68		ug/L		682	-0.000
>	Ge	74		ug/L		111975	111974.604
	As	75	**0.475**	ug/L	193.109	262	0.001
	Se	77		ug/L		5312	-0.003
	Se	82	**0.298**	ug/L	104.637	-4	0.000
	Kr	83		ug/L		39	-0.000
	Sr	88	**0.008**	ug/L	70.697	175	0.000
	Y	89		ug/L		14	0.000
	Zr	90	**0.175**	ug/L	17.773	719	0.006
	Mo	98	**0.127**	ug/L	15.388	175	0.002
	Ag	107	**0.027**	ug/L	5.509	92	0.001
	Cd	111	**0.013**	ug/L	153.636	17	0.000
	Cd	114		ug/L		34	0.000
>	In	115		ug/L		73399	73398.852
	Sn	120	**0.751**	ug/L	4.097	1482	0.018
	Sb	121	**1.559**	ug/L	10.633	2321	0.028
	Sb	123		ug/L		1786	0.022
	Ba	135		ug/L		21	0.000
	Ba	137	**-0.007**	ug/L	109.444	25	-0.000
	Ho	165		ug/L		4	-0.000
>	Lu	175		ug/L		68136	68135.508
	Tl	205	**0.301**	ug/L	22.320	232	0.003
	Pb	208	**0.154**	ug/L	9.649	1022	0.009
	Bi	209		ug/L		13	-0.000
	Th	232	**0.267**	ug/L	23.533	1884	0.022
	U	238	**0.057**	ug/L	15.422	528	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			96.2		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			95.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.2		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 21:13:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 6.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.259**	ug/L	6.938	6098	0.036
	Be	9	**50.858**	ug/L	4.144	2466	0.015
	B	11	**103.784**	ug/L	3.841	5107	0.030
	Na	23	**5298.804**	ug/L	5.567	6468195	38.133
	Mg	24	**4948.972**	ug/L	4.620	4099020	24.326
	Al	27	**4929.135**	ug/L	2.447	5788083	34.350
	P	31	**5040.956**	ug/L	2.093	294941	1.735
	K	39	**4900.087**	ug/L	4.331	10639009	60.898
	Ca	43	**5014.151**	ug/L	1.717	20682	0.120
>	Sc	45		ug/L		168446	168445.524
	Ti	47	**50.451**	ug/L	0.787	9747	0.057
	V	51	**47.502**	ug/L	5.319	75523	0.486
	Cr	52	**51.099**	ug/L	0.441	91148	0.528
	Cr	53		ug/L		149345	0.021
	Mn	55	**51.831**	ug/L	0.556	148373	0.875
	Fe	57	**5071.639**	ug/L	1.137	290972	1.712
	Co	59	**50.753**	ug/L	0.627	104729	0.621
	Ni	60	**53.013**	ug/L	0.545	22885	0.135
	Cu	63		ug/L		49541	0.293
	Cu	65	**51.472**	ug/L	0.974	23772	0.141
	Zn	66	**51.417**	ug/L	1.564	12586	0.110
	Zn	67		ug/L		9497	0.012
	Zn	68		ug/L		9508	0.077
>	Ge	74		ug/L		114370	114369.843
	As	75	**48.682**	ug/L	2.731	14308	0.124
	Se	77		ug/L		7122	0.012
	Se	82	**50.654**	ug/L	2.466	1388	0.012
	Kr	83		ug/L		44	-0.000
	Sr	88	**50.452**	ug/L	1.396	219563	2.999
	Y	89		ug/L		40	0.000
	Zr	90	**48.477**	ug/L	0.684	115478	1.574
	Mo	98	**48.865**	ug/L	0.851	50353	0.687
	Ag	107	**49.052**	ug/L	0.673	79837	1.090
	Cd	111	**50.793**	ug/L	1.361	19590	0.268
	Cd	114		ug/L		45623	0.623
>	In	115		ug/L		73178	73178.479
	Sn	120	**49.716**	ug/L	0.202	86828	1.184
	Sb	121	**49.883**	ug/L	2.767	66906	0.911
	Sb	123		ug/L		51044	0.695
	Ba	135		ug/L		19697	0.286
	Ba	137	**49.847**	ug/L	0.312	33588	0.487
	Ho	165		ug/L		10	0.000
>	Lu	175		ug/L		68892	68892.100
	Tl	205	**49.531**	ug/L	1.285	29235	0.424
	Pb	208	**51.107**	ug/L	0.574	216249	3.134
	Bi	209		ug/L		52	0.001
	Th	232	**51.031**	ug/L	1.746	293673	4.258
	U	238	**52.837**	ug/L	1.040	317394	4.605

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	100.518				
	Be	9	101.716				
	B	11	103.784				
	Na	23	105.976				
	Mg	24	98.979				
	Al	27	97.607				
	P	31	100.819				
	K	39	98.002				
	Ca	43	100.283				
>	Sc	45		98.4			
	Ti	47	100.902				
	V	51	95.004				
	Cr	52	102.197				
	Cr	53					
	Mn	55	103.661				
	Fe	57	101.433				
	Co	59	101.506				
	Ni	60	106.026				
	Cu	63					
	Cu	65	102.945				
	Zn	66	102.834				
	Zn	67					
	Zn	68					
>	Ge	74		97.2			
	As	75	97.363				
	Se	77					
	Se	82	101.307				
	Kr	83					
	Sr	88	100.904				
	Y	89					
	Zr	90	96.954				
	Mo	98	97.731				
	Ag	107	98.104				
	Cd	111	101.585				
	Cd	114					
>	In	115		97.1			
	Sn	120	99.431				
	Sb	121	99.767				
	Sb	123					
	Ba	135					
	Ba	137	99.694				
	Ho	165					
>	Lu	175		98.3			
	Tl	205	99.063				
	Pb	208	102.214				
	Bi	209					
	Th	232	102.062				
	U	238	105.675				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 21:19:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 7.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.027**	ug/L	134.785	26	0.000
	Be	9	**0.001**	ug/L	4848.174	4	0.000
	B	11	**2.637**	ug/L	36.530	192	0.001
	Na	23	**-16.064**	ug/L	32.417	25357	-0.116
	Mg	24	**-3.562**	ug/L	19.465	333	-0.018
	Al	27	**2.264**	ug/L	21.518	3334	0.016
	P	31	**-4.477**	ug/L	33.791	2448	-0.002
	K	39	**6.913**	ug/L	154.331	397465	0.086
	Ca	43	**-5.051**	ug/L	160.810	379	-0.000
>	Sc	45		ug/L		169444	169443.651
	Ti	47	**0.118**	ug/L	93.881	200	0.000
	V	51	**-1.462**	ug/L	57.695	-8919	-0.015
	Cr	52	**-0.084**	ug/L	115.832	2077	-0.001
	Cr	53		ug/L		138093	-0.051
	Mn	55	**-0.007**	ug/L	63.660	906	-0.000
	Fe	57	**3.147**	ug/L	36.142	2830	0.001
	Co	59	**0.013**	ug/L	30.862	136	0.000
	Ni	60	**-0.000**	ug/L	1846.482	110	-0.000
	Cu	63		ug/L		182	0.000
	Cu	65	**-0.004**	ug/L	355.585	99	-0.000
	Zn	66	**0.081**	ug/L	48.787	78	0.000
	Zn	67		ug/L		7614	-0.006
	Zn	68		ug/L		659	-0.001
>	Ge	74		ug/L		115671	115671.228
	As	75	**0.728**	ug/L	179.090	345	0.002
	Se	77		ug/L		5597	-0.002
	Se	82	**-0.307**	ug/L	85.543	-21	-0.000
	Kr	83		ug/L		50	0.000
	Sr	88	**0.009**	ug/L	15.090	180	0.001
	Y	89		ug/L		14	0.000
	Zr	90	**0.109**	ug/L	18.137	573	0.004
	Mo	98	**0.043**	ug/L	37.648	90	0.001
	Ag	107	**0.020**	ug/L	18.163	83	0.000
	Cd	111	**0.022**	ug/L	35.432	21	0.000
	Cd	114		ug/L		35	0.000
>	In	115		ug/L		74842	74841.951
	Sn	120	**0.198**	ug/L	19.215	526	0.005
	Sb	121	**0.722**	ug/L	21.271	1224	0.013
	Sb	123		ug/L		954	0.010
	Ba	135		ug/L		23	0.000
	Ba	137	**0.007**	ug/L	43.491	35	0.000
	Ho	165		ug/L		5	-0.000
>	Lu	175		ug/L		68704	68704.167
	Tl	205	**0.183**	ug/L	7.083	165	0.002
	Pb	208	**0.035**	ug/L	7.293	531	0.002
	Bi	209		ug/L		14	-0.000
	Th	232	**0.099**	ug/L	32.862	939	0.008
	U	238	**0.017**	ug/L	25.236	296	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.0		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			99.3		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.0		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 22:03:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 6.154

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.957**	ug/L	10.009	6082	0.035
	Be	9	**48.893**	ug/L	4.110	2427	0.014
	B	11	**99.254**	ug/L	2.102	5003	0.029
	Na	23	**5259.138**	ug/L	2.819	6569073	37.847
	Mg	24	**5045.312**	ug/L	14.078	4279628	24.800
	Al	27	**4774.996**	ug/L	3.229	5737728	33.275
	P	31	**4997.529**	ug/L	0.600	299321	1.720
	K	39	**4932.864**	ug/L	1.734	10956990	61.305
	Ca	43	**4962.331**	ug/L	1.530	20951	0.119
>	Sc	45		ug/L		172382	172381.571
	Ti	47	**50.808**	ug/L	0.534	10043	0.057
	V	51	**48.967**	ug/L	1.942	79845	0.501
	Cr	52	**50.768**	ug/L	0.557	92692	0.525
	Cr	53		ug/L		152285	0.018
	Mn	55	**50.924**	ug/L	2.660	149174	0.860
	Fe	57	**4974.400**	ug/L	2.721	292095	1.679
	Co	59	**49.420**	ug/L	2.344	104355	0.605
	Ni	60	**52.241**	ug/L	1.568	23078	0.133
	Cu	63		ug/L		49911	0.289
	Cu	65	**50.335**	ug/L	0.905	23795	0.137
	Zn	66	**50.836**	ug/L	0.865	12690	0.108
	Zn	67		ug/L		9493	0.010
	Zn	68		ug/L		9681	0.077
>	Ge	74		ug/L		116618	116617.557
	As	75	**47.938**	ug/L	4.291	14364	0.122
	Se	77		ug/L		7411	0.013
	Se	82	**50.521**	ug/L	3.338	1411	0.012
	Kr	83		ug/L		47	-0.000
	Sr	88	**50.309**	ug/L	1.996	222129	2.990
	Y	89		ug/L		48	0.000
	Zr	90	**48.237**	ug/L	1.819	116582	1.566
	Mo	98	**48.594**	ug/L	2.113	50798	0.684
	Ag	107	**49.027**	ug/L	1.210	80957	1.090
	Cd	111	**50.203**	ug/L	0.587	19645	0.264
	Cd	114		ug/L		46570	0.627
>	In	115		ug/L		74252	74251.529
	Sn	120	**48.754**	ug/L	1.672	86391	1.161
	Sb	121	**49.111**	ug/L	4.715	66804	0.897
	Sb	123		ug/L		51071	0.685
	Ba	135		ug/L		19927	0.284
	Ba	137	**49.383**	ug/L	2.615	33836	0.483
	Ho	165		ug/L		9	0.000
>	Lu	175		ug/L		70058	70057.744
	Tl	205	**49.128**	ug/L	1.792	29486	0.420
	Pb	208	**50.167**	ug/L	1.577	215867	3.076
	Bi	209		ug/L		55	0.001
	Th	232	**50.082**	ug/L	2.142	293095	4.179
	U	238	**51.769**	ug/L	1.186	316247	4.512

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	97.914				
	Be	9	97.785				
	B	11	99.254				
	Na	23	105.183				
	Mg	24	100.906				
	Al	27	94.554				
	P	31	99.951				
	K	39	98.657				
	Ca	43	99.247				
>	Sc	45		100.7			
	Ti	47	101.617				
	V	51	97.933				
	Cr	52	101.535				
	Cr	53					
	Mn	55	101.847				
	Fe	57	99.488				
	Co	59	98.841				
	Ni	60	104.482				
	Cu	63					
	Cu	65	100.670				
	Zn	66	101.672				
	Zn	67					
	Zn	68					
>	Ge	74		99.1			
	As	75	95.876				
	Se	77					
	Se	82	101.042				
	Kr	83					
	Sr	88	100.617				
	Y	89					
	Zr	90	96.474				
	Mo	98	97.188				
	Ag	107	98.054				
	Cd	111	100.406				
	Cd	114					
>	In	115		98.5			
	Sn	120	97.507				
	Sb	121	98.221				
	Sb	123					
	Ba	135					
	Ba	137	98.765				
	Ho	165					
>	Lu	175		99.9			
	Tl	205	98.256				
	Pb	208	100.334				
	Bi	209					
	Th	232	100.163				
	U	238	103.538				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 22:09:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 7.155

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.018**	**ug/L**	160.034	25	0.000
	Be	9	**0.027**	**ug/L**	45.484	5	0.000
	B	11	**2.419**	**ug/L**	22.696	184	0.001
	Na	23	**-17.624**	**ug/L**	38.470	23688	-0.127
	Mg	24	**-0.816**	**ug/L**	160.634	2667	-0.004
	Al	27	**1.965**	**ug/L**	86.814	3000	0.014
	P	31	**-3.639**	**ug/L**	63.100	2529	-0.001
	K	39	**-10.763**	**ug/L**	73.571	365289	-0.134
	Ca	43	**-10.333**	**ug/L**	98.913	362	-0.000
>	Sc	45		**ug/L**		171744	171744.400
	Ti	47	**0.060**	**ug/L**	101.971	192	0.000
	V	51	**-0.796**	**ug/L**	195.875	-7897	-0.008
	Cr	52	**0.157**	**ug/L**	44.741	2532	0.002
	Cr	53		**ug/L**		136400	-0.072
	Mn	55	**0.024**	**ug/L**	19.317	1010	0.000
	Fe	57	**5.417**	**ug/L**	10.659	3000	0.002
	Co	59	**0.007**	**ug/L**	75.762	124	0.000
	Ni	60	**0.028**	**ug/L**	51.470	124	0.000
	Cu	63		**ug/L**		182	0.000
	Cu	65	**-0.001**	**ug/L**	4180.240	102	-0.000
	Zn	66	**0.037**	**ug/L**	127.592	68	0.000
	Zn	67		**ug/L**		7262	-0.009
	Zn	68		**ug/L**		633	-0.001
>	Ge	74		**ug/L**		116829	116829.271
	As	75	**0.640**	**ug/L**	298.367	324	0.002
	Se	77		**ug/L**		5863	-0.000
	Se	82	**0.093**	**ug/L**	374.560	-10	0.000
	Kr	83		**ug/L**		43	-0.000
	Sr	88	**0.010**	**ug/L**	12.564	187	0.001
	Y	89		**ug/L**		20	0.000
	Zr	90	**0.109**	**ug/L**	14.516	572	0.004
	Mo	98	**0.035**	**ug/L**	15.183	82	0.000
	Ag	107	**0.019**	**ug/L**	17.643	80	0.000
	Cd	111	**-0.011**	**ug/L**	135.579	8	-0.000
	Cd	114		**ug/L**		31	0.000
>	In	115		**ug/L**		74755	74755.488
	Sn	120	**0.137**	**ug/L**	8.058	417	0.003
	Sb	121	**0.584**	**ug/L**	15.827	1035	0.011
	Sb	123		**ug/L**		776	0.008
	Ba	135		**ug/L**		24	0.000
	Ba	137	**0.019**	**ug/L**	122.024	43	0.000
	Ho	165		**ug/L**		8	0.000
>	Lu	175		**ug/L**		68649	68649.238
	Tl	205	**0.121**	**ug/L**	21.396	129	0.001
	Pb	208	**0.023**	**ug/L**	24.881	478	0.001
	Bi	209		**ug/L**		14	-0.000
	Th	232	**0.103**	**ug/L**	34.779	961	0.009
	U	238	**0.018**	**ug/L**	20.080	300	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		97.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 22:58:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 6.163

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.079**	**ug/L**	8.201	6131	0.036
	Be	9	**50.763**	**ug/L**	2.319	2483	0.015
	B	11	**100.047**	**ug/L**	3.181	4970	0.029
	Na	23	**5359.599**	**ug/L**	12.231	6593091	38.570
	Mg	24	**5079.810**	**ug/L**	3.394	4245601	24.970
	Al	27	**5333.591**	**ug/L**	1.833	6314019	37.168
	P	31	**5020.101**	**ug/L**	1.283	296281	1.728
	K	39	**4813.586**	**ug/L**	8.119	10549855	59.823
	Ca	43	**5000.568**	**ug/L**	1.942	20804	0.120
>	Sc	45		**ug/L**		169870	169870.043
	Ti	47	**49.901**	**ug/L**	1.440	9724	0.056
	V	51	**49.070**	**ug/L**	3.847	78885	0.502
	Cr	52	**50.434**	**ug/L**	0.393	90753	0.521
	Cr	53		**ug/L**		149373	0.013
	Mn	55	**50.929**	**ug/L**	0.657	147035	0.860
	Fe	57	**5039.342**	**ug/L**	0.869	291622	1.701
	Co	59	**50.142**	**ug/L**	0.307	104348	0.614
	Ni	60	**52.159**	**ug/L**	0.815	22709	0.133
	Cu	63		**ug/L**		48957	0.287
	Cu	65	**50.530**	**ug/L**	0.993	23538	0.138
	Zn	66	**50.620**	**ug/L**	1.188	12521	0.108
	Zn	67		**ug/L**		9096	0.007
	Zn	68		**ug/L**		9498	0.076
>	Ge	74		**ug/L**		115554	115553.954
	As	75	**47.656**	**ug/L**	3.660	14149	0.121
	Se	77		**ug/L**		7299	0.013
	Se	82	**50.620**	**ug/L**	2.871	1401	0.012
	Kr	83		**ug/L**		44	-0.000
	Sr	88	**50.066**	**ug/L**	2.975	220689	2.976
	Y	89		**ug/L**		75	0.001
	Zr	90	**48.410**	**ug/L**	3.552	116791	1.572
	Mo	98	**48.546**	**ug/L**	4.081	50655	0.683
	Ag	107	**47.952**	**ug/L**	1.841	79060	1.066
	Cd	111	**49.026**	**ug/L**	2.935	19151	0.258
	Cd	114		**ug/L**		45721	0.616
>	In	115		**ug/L**		74152	74151.761
	Sn	120	**49.039**	**ug/L**	2.475	86753	1.168
	Sb	121	**48.909**	**ug/L**	5.099	66416	0.893
	Sb	123		**ug/L**		51149	0.688
	Ba	135		**ug/L**		19817	0.286
	Ba	137	**49.413**	**ug/L**	2.009	33448	0.483
	Ho	165		**ug/L**		11	0.000
>	Lu	175		**ug/L**		69207	69206.587
	Tl	205	**49.518**	**ug/L**	1.666	29362	0.423
	Pb	208	**50.537**	**ug/L**	0.329	214831	3.099
	Bi	209		**ug/L**		56	0.001
	Th	232	**50.681**	**ug/L**	1.498	293042	4.229
	U	238	**52.504**	**ug/L**	1.438	316866	4.576

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	100.158				
	Be	9	101.526				
	B	11	100.047				
	Na	23	107.192				
	Mg	24	101.596				
	Al	27	105.616				
	P	31	100.402				
	K	39	96.272				
	Ca	43	100.011				
>	Sc	45			99.2		
	Ti	47	99.802				
	V	51	98.139				
	Cr	52	100.868				
	Cr	53					
	Mn	55	101.858				
	Fe	57	100.787				
	Co	59	100.284				
	Ni	60	104.318				
	Cu	63					
	Cu	65	101.060				
	Zn	66	101.240				
	Zn	67					
	Zn	68					
>	Ge	74			98.2		
	As	75	95.312				
	Se	77					
	Se	82	101.241				
	Kr	83					
	Sr	88	100.132				
	Y	89					
	Zr	90	96.819				
	Mo	98	97.092				
	Ag	107	95.904				
	Cd	111	98.052				
	Cd	114					
>	In	115			98.3		
	Sn	120	98.078				
	Sb	121	97.818				
	Sb	123					
	Ba	135					
	Ba	137	98.826				
	Ho	165					
>	Lu	175			98.7		
	Tl	205	99.035				
	Pb	208	101.073				
	Bi	209					
	Th	232	101.361				
	U	238	105.008				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 23:05:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 7.164

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.033**	ug/L	146.192	27	0.000
	Be	9	**-0.020**	ug/L	100.403	3	-0.000
	B	11	**2.049**	ug/L	16.710	164	0.001
	Na	23	**-15.921**	ug/L	16.808	25690	-0.115
	Mg	24	**0.025**	ug/L	10044.904	3334	0.000
	Al	27	**3.643**	ug/L	22.340	5001	0.025
	P	31	**-0.569**	ug/L	318.707	2695	-0.000
	K	39	**-5.066**	ug/L	150.950	374861	-0.063
	Ca	43	**-16.911**	ug/L	40.233	333	-0.000
>	Sc	45		ug/L		170634	170634.094
	Ti	47	**0.093**	ug/L	45.486	197	0.000
	V	51	**-2.000**	ug/L	47.098	-9914	-0.020
	Cr	52	**0.003**	ug/L	1603.125	2246	0.000
	Cr	53		ug/L		138774	-0.053
	Mn	55	**0.031**	ug/L	64.535	1022	0.001
	Fe	57	**8.060**	ug/L	23.551	3133	0.003
	Co	59	**0.017**	ug/L	16.226	144	0.000
	Ni	60	**0.023**	ug/L	71.694	121	0.000
	Cu	63		ug/L		185	0.000
	Cu	65	**-0.016**	ug/L	75.986	94	-0.000
	Zn	66	**0.073**	ug/L	54.872	76	0.000
	Zn	67		ug/L		6988	-0.011
	Zn	68		ug/L		634	-0.001
>	Ge	74		ug/L		115613	115612.789
	As	75	**-0.742**	ug/L	67.205	-86	-0.002
	Se	77		ug/L		5813	-0.000
	Se	82	**0.629**	ug/L	17.600	5	0.000
	Kr	83		ug/L		35	-0.000
	Sr	88	**0.011**	ug/L	22.147	189	0.001
	Y	89		ug/L		20	0.000
	Zr	90	**0.119**	ug/L	32.140	594	0.004
	Mo	98	**0.026**	ug/L	25.720	72	0.000
	Ag	107	**0.009**	ug/L	82.112	64	0.000
	Cd	111	**0.012**	ug/L	141.714	17	0.000
	Cd	114		ug/L		35	0.000
>	In	115		ug/L		74218	74217.685
	Sn	120	**0.136**	ug/L	17.838	411	0.003
	Sb	121	**0.545**	ug/L	24.286	975	0.010
	Sb	123		ug/L		770	0.008
	Ba	135		ug/L		22	0.000
	Ba	137	**0.008**	ug/L	94.053	36	0.000
	Ho	165		ug/L		5	-0.000
>	Lu	175		ug/L		68611	68611.392
	Tl	205	**0.082**	ug/L	30.080	106	0.001
	Pb	208	**0.011**	ug/L	22.721	429	0.001
	Bi	209		ug/L		10	-0.000
	Th	232	**0.097**	ug/L	35.943	928	0.008
	U	238	**0.017**	ug/L	15.605	291	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.7		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			98.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			97.9		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 13, 2010 23:36:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 6.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.801**	ug/L	6.024	6201	0.036
	Be	9	**49.971**	ug/L	1.894	2437	0.014
	B	11	**100.510**	ug/L	1.061	4976	0.029
	Na	23	**5403.890**	ug/L	10.937	6631521	38.889
	Mg	24	**5178.197**	ug/L	4.615	4313656	25.453
	Al	27	**5163.183**	ug/L	2.686	6093014	35.981
	P	31	**5020.295**	ug/L	0.381	295319	1.728
	K	39	**4969.661**	ug/L	6.765	10838119	61.763
	Ca	43	**5013.358**	ug/L	1.978	20786	0.120
>	Sc	45		ug/L		169318	169317.855
	Ti	47	**50.616**	ug/L	1.083	9829	0.057
	V	51	**49.200**	ug/L	4.446	78832	0.503
	Cr	52	**50.363**	ug/L	2.275	90330	0.520
	Cr	53		ug/L		147194	0.004
	Mn	55	**51.478**	ug/L	1.014	148132	0.869
	Fe	57	**5007.191**	ug/L	0.461	288828	1.690
	Co	59	**49.894**	ug/L	0.993	103497	0.611
	Ni	60	**52.124**	ug/L	0.269	22619	0.133
	Cu	63		ug/L		49327	0.290
	Cu	65	**50.108**	ug/L	0.769	23267	0.137
	Zn	66	**50.753**	ug/L	0.818	12400	0.108
	Zn	67		ug/L		8865	0.006
	Zn	68		ug/L		9529	0.077
>	Ge	74		ug/L		114140	114139.676
	As	75	**47.305**	ug/L	3.739	13875	0.120
	Se	77		ug/L		6965	0.010
	Se	82	**49.785**	ug/L	1.893	1361	0.012
	Kr	83		ug/L		40	-0.000
	Sr	88	**49.941**	ug/L	1.590	220599	2.968
	Y	89		ug/L		76	0.001
	Zr	90	**48.478**	ug/L	2.046	117202	1.574
	Mo	98	**48.333**	ug/L	3.161	50540	0.680
	Ag	107	**47.929**	ug/L	3.136	79166	1.065
	Cd	111	**49.607**	ug/L	1.759	19418	0.261
	Cd	114		ug/L		45539	0.613
>	In	115		ug/L		74277	74276.651
	Sn	120	**49.069**	ug/L	1.344	86978	1.169
	Sb	121	**48.831**	ug/L	4.081	66463	0.892
	Sb	123		ug/L		50317	0.675
	Ba	135		ug/L		19601	0.278
	Ba	137	**48.826**	ug/L	1.041	33623	0.477
	Ho	165		ug/L		12	0.000
>	Lu	175		ug/L		70399	70399.407
	Tl	205	**49.358**	ug/L	1.221	29772	0.422
	Pb	208	**50.442**	ug/L	0.610	218123	3.093
	Bi	209		ug/L		58	0.001
	Th	232	**49.541**	ug/L	1.237	291387	4.134
	U	238	**51.378**	ug/L	0.249	315423	4.478

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	101.603				
	Be	9	99.941				
	B	11	100.510				
	Na	23	108.078				
	Mg	24	103.564				
	Al	27	102.241				
	P	31	100.406				
	K	39	99.393				
	Ca	43	100.267				
>	Sc	45			98.9		
	Ti	47	101.232				
	V	51	98.400				
	Cr	52	100.726				
	Cr	53					
	Mn	55	102.956				
	Fe	57	100.144				
	Co	59	99.787				
	Ni	60	104.248				
	Cu	63					
	Cu	65	100.216				
	Zn	66	101.506				
	Zn	67					
	Zn	68					
>	Ge	74			97.0		
	As	75	94.610				
	Se	77					
	Se	82	99.570				
	Kr	83					
	Sr	88	99.883				
	Y	89					
	Zr	90	96.956				
	Mo	98	96.666				
	Ag	107	95.859				
	Cd	111	99.213				
	Cd	114					
>	In	115			98.5		
	Sn	120	98.137				
	Sb	121	97.661				
	Sb	123					
	Ba	135					
	Ba	137	97.653				
	Ho	165					
>	Lu	175			100.4		
	Tl	205	98.715				
	Pb	208	100.885				
	Bi	209					
	Th	232	99.082				
	U	238	102.756				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 13, 2010 23:42:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 7.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.004**	ug/L	577.610	23	0.000
	Be	9	**-0.020**	ug/L	101.133	3	-0.000
	B	11	**1.668**	ug/L	39.216	145	0.000
	Na	23	**-14.697**	ug/L	34.615	27026	-0.106
	Mg	24	**1.625**	ug/L	151.367	4668	0.008
	Al	27	**3.095**	ug/L	78.376	4334	0.022
	P	31	**2.034**	ug/L	38.022	2831	0.001
	K	39	**-4.404**	ug/L	164.787	374177	-0.055
	Ca	43	**-22.510**	ug/L	33.549	308	-0.001
>	Sc	45		ug/L		169663	169662.598
	Ti	47	**0.087**	ug/L	112.123	195	0.000
	V	51	**0.137**	ug/L	1130.564	-6161	0.001
	Cr	52	**-0.124**	ug/L	18.852	2011	-0.001
	Cr	53		ug/L		134238	-0.075
	Mn	55	**0.029**	ug/L	50.106	1010	0.000
	Fe	57	**4.841**	ug/L	24.340	2931	0.002
	Co	59	**0.007**	ug/L	117.785	122	0.000
	Ni	60	**-0.002**	ug/L	1660.019	110	-0.000
	Cu	63		ug/L		153	-0.000
	Cu	65	**-0.014**	ug/L	83.973	95	-0.000
	Zn	66	**0.043**	ug/L	41.580	68	0.000
	Zn	67		ug/L		6859	-0.012
	Zn	68		ug/L		653	-0.001
>	Ge	74		ug/L		115080	115080.150
	As	75	**0.571**	ug/L	255.485	298	0.001
	Se	77		ug/L		5576	-0.002
	Se	82	**0.206**	ug/L	175.727	-7	0.000
	Kr	83		ug/L		42	-0.000
	Sr	88	**0.008**	ug/L	39.908	179	0.001
	Y	89		ug/L		22	0.000
	Zr	90	**0.127**	ug/L	12.799	617	0.004
	Mo	98	**0.034**	ug/L	30.057	80	0.000
	Ag	107	**0.018**	ug/L	40.555	80	0.000
	Cd	111	**0.017**	ug/L	35.737	19	0.000
	Cd	114		ug/L		36	0.000
>	In	115		ug/L		74753	74753.201
	Sn	120	**0.127**	ug/L	25.188	398	0.003
	Sb	121	**0.549**	ug/L	20.280	987	0.010
	Sb	123		ug/L		760	0.008
	Ba	135		ug/L		19	0.000
	Ba	137	**0.012**	ug/L	70.263	39	0.000
	Ho	165		ug/L		3	-0.000
>	Lu	175		ug/L		70025	70024.901
	Tl	205	**0.072**	ug/L	36.263	102	0.001
	Pb	208	**-0.003**	ug/L	81.886	376	-0.000
	Bi	209		ug/L		14	-0.000
	Th	232	**0.104**	ug/L	34.873	990	0.009
	U	238	**0.011**	ug/L	19.465	263	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 14, 2010 00:13:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 6.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.343**	ug/L	8.913	6319	0.037
	Be	9	**51.647**	ug/L	3.754	2541	0.015
	B	11	**100.480**	ug/L	4.177	5019	0.029
	Na	23	**5186.421**	ug/L	5.365	6420158	37.324
	Mg	24	**5005.907**	ug/L	0.700	4208955	24.606
	Al	27	**4822.096**	ug/L	3.867	5743323	33.604
	P	31	**4961.103**	ug/L	1.199	294563	1.708
	K	39	**5020.332**	ug/L	9.784	11037229	62.392
	Ca	43	**4913.224**	ug/L	0.822	20569	0.118
>	Sc	45		ug/L		170903	170902.760
	Ti	47	**50.909**	ug/L	0.869	9976	0.057
	V	51	**47.255**	ug/L	2.876	76195	0.483
	Cr	52	**50.639**	ug/L	0.879	91660	0.523
	Cr	53		ug/L		149022	0.006
	Mn	55	**51.383**	ug/L	1.052	149228	0.868
	Fe	57	**4951.768**	ug/L	1.924	288268	1.671
	Co	59	**49.965**	ug/L	0.684	104604	0.611
	Ni	60	**52.575**	ug/L	0.085	23027	0.134
	Cu	63		ug/L		49484	0.289
	Cu	65	**50.443**	ug/L	0.588	23640	0.138
	Zn	66	**50.713**	ug/L	0.736	12618	0.108
	Zn	67		ug/L		9006	0.006
	Zn	68		ug/L		9559	0.076
>	Ge	74		ug/L		116234	116233.779
	As	75	**48.771**	ug/L	4.122	14564	0.124
	Se	77		ug/L		7488	0.014
	Se	82	**49.706**	ug/L	2.958	1384	0.012
	Kr	83		ug/L		39	-0.000
	Sr	88	**50.265**	ug/L	0.968	222253	2.987
	Y	89		ug/L		84	0.001
	Zr	90	**47.883**	ug/L	1.676	115909	1.555
	Mo	98	**48.288**	ug/L	1.255	50552	0.679
	Ag	107	**48.471**	ug/L	1.567	80145	1.077
	Cd	111	**49.565**	ug/L	2.209	19419	0.261
	Cd	114		ug/L		45908	0.617
>	In	115		ug/L		74350	74350.053
	Sn	120	**48.860**	ug/L	0.272	86703	1.164
	Sb	121	**48.883**	ug/L	2.640	66619	0.893
	Sb	123		ug/L		51211	0.686
	Ba	135		ug/L		19971	0.284
	Ba	137	**49.099**	ug/L	0.253	33783	0.480
	Ho	165		ug/L		9	0.000
>	Lu	175		ug/L		70345	70345.154
	Tl	205	**49.465**	ug/L	0.368	29813	0.423
	Pb	208	**50.351**	ug/L	0.814	217551	3.087
	Bi	209		ug/L		48	0.000
	Th	232	**50.200**	ug/L	0.648	295027	4.189
	U	238	**52.157**	ug/L	0.329	319947	4.546

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.686				
	Be	9	103.294				
	B	11	100.480				
	Na	23	103.728				
	Mg	24	100.118				
	Al	27	95.487				
	P	31	99.222				
	K	39	100.407				
	Ca	43	98.264				
>	Sc	45		99.8			
	Ti	47	101.818				
	V	51	94.509				
	Cr	52	101.278				
	Cr	53					
	Mn	55	102.767				
	Fe	57	99.035				
	Co	59	99.929				
	Ni	60	105.151				
	Cu	63					
	Cu	65	100.885				
	Zn	66	101.426				
	Zn	67					
	Zn	68					
>	Ge	74		98.7			
	As	75	97.542				
	Se	77					
	Se	82	99.411				
	Kr	83					
	Sr	88	100.529				
	Y	89					
	Zr	90	95.766				
	Mo	98	96.576				
	Ag	107	96.943				
	Cd	111	99.130				
	Cd	114					
>	In	115		98.6			
	Sn	120	97.719				
	Sb	121	97.767				
	Sb	123					
	Ba	135					
	Ba	137	98.199				
	Ho	165					
>	Lu	175		100.3			
	Tl	205	98.929				
	Pb	208	100.702				
	Bi	209					
	Th	232	100.400				
	U	238	104.315				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 14, 2010 00:19:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 7.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.032**	**ug/L**	143.207	27	0.000
	Be	9	**-0.027**	**ug/L**	87.595	3	-0.000
	B	11	**1.839**	**ug/L**	21.389	155	0.001
	Na	23	**-19.873**	**ug/L**	15.656	21016	-0.143
	Mg	24	**-0.016**	**ug/L**	19205.761	3334	-0.000
	Al	27	**3.320**	**ug/L**	93.712	4668	0.023
	P	31	**-2.157**	**ug/L**	117.973	2618	-0.001
	K	39	**11.090**	**ug/L**	88.313	411861	0.138
	Ca	43	**-10.685**	**ug/L**	8.902	361	-0.000
>	Sc	45		**ug/L**		171802	171801.648
	Ti	47	**0.119**	**ug/L**	112.105	203	0.000
	V	51	**-2.258**	**ug/L**	50.224	-10429	-0.023
	Cr	52	**0.032**	**ug/L**	119.099	2312	0.000
	Cr	53		**ug/L**		137395	-0.066
	Mn	55	**0.028**	**ug/L**	14.283	1022	0.000
	Fe	57	**8.151**	**ug/L**	24.666	3160	0.003
	Co	59	**0.012**	**ug/L**	71.706	135	0.000
	Ni	60	**0.024**	**ug/L**	184.648	123	0.000
	Cu	63		**ug/L**		181	0.000
	Cu	65	**-0.013**	**ug/L**	121.656	96	-0.000
	Zn	66	**0.044**	**ug/L**	69.293	69	0.000
	Zn	67		**ug/L**		7008	-0.011
	Zn	68		**ug/L**		602	-0.001
>	Ge	74		**ug/L**		116141	116140.699
	As	75	**0.323**	**ug/L**	368.883	230	0.001
	Se	77		**ug/L**		6035	0.001
	Se	82	**0.293**	**ug/L**	146.828	-4	0.000
	Kr	83		**ug/L**		41	-0.000
	Sr	88	**0.010**	**ug/L**	8.734	186	0.001
	Y	89		**ug/L**		14	-0.000
	Zr	90	**0.127**	**ug/L**	23.361	619	0.004
	Mo	98	**0.036**	**ug/L**	19.058	83	0.001
	Ag	107	**0.014**	**ug/L**	45.776	72	0.000
	Cd	111	**0.000**	**ug/L**	8562.402	13	0.000
	Cd	114		**ug/L**		32	0.000
>	In	115		**ug/L**		75043	75043.115
	Sn	120	**0.122**	**ug/L**	12.022	392	0.003
	Sb	121	**0.541**	**ug/L**	21.728	980	0.010
	Sb	123		**ug/L**		750	0.007
	Ba	135		**ug/L**		17	0.000
	Ba	137	**0.013**	**ug/L**	137.676	39	0.000
	Ho	165		**ug/L**		8	0.000
>	Lu	175		**ug/L**		69465	69465.173
	Tl	205	**0.081**	**ug/L**	31.784	106	0.001
	Pb	208	**0.004**	**ug/L**	112.615	405	0.000
	Bi	209		**ug/L**		11	-0.000
	Th	232	**0.101**	**ug/L**	24.163	964	0.008
	U	238	**0.014**	**ug/L**	15.980	280	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011703
Sample Date/Time: Thursday, January 14, 2010 00:26:12
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 940082|1|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\1202011703.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.079**	ug/L	112.602	32	0.000
	Be	9	**-0.020**	ug/L	203.173	3	-0.000
	B	11	**0.773**	ug/L	37.624	101	0.000
	Na	23	**-14.749**	ug/L	10.209	27026	-0.106
	Mg	24	**-3.159**	ug/L	22.003	667	-0.016
	Al	27	**1.123**	ug/L	128.432	2000	0.008
	P	31	**-7.670**	ug/L	3.560	2267	-0.003
	K	39	**6.609**	ug/L	242.467	397473	0.082
	Ca	43	**26.832**	ug/L	36.720	509	0.001
>	Sc	45		ug/L		169826	169826.235
	Ti	47	**0.333**	ug/L	19.638	242	0.000
	V	51	**-12.373**	ug/L	13.760	-27905	-0.127
	Cr	52	**3.004**	ug/L	3.548	7501	0.031
	Cr	53		ug/L		275733	0.757
	Mn	55	**0.356**	ug/L	7.721	1950	0.006
	Fe	57	**15.246**	ug/L	5.434	3530	0.005
	Co	59	**-0.005**	ug/L	102.411	99	-0.000
	Ni	60	**-0.169**	ug/L	16.890	38	-0.000
	Cu	63		ug/L		108	-0.000
	Cu	65	**-0.076**	ug/L	20.627	66	-0.000
	Zn	66	**0.974**	ug/L	12.632	296	0.002
	Zn	67		ug/L		15550	0.064
	Zn	68		ug/L		1292	0.005
>	Ge	74		ug/L		114851	114850.720
	As	75	**2.044**	ug/L	79.387	727	0.005
	Se	77		ug/L		16483	0.093
	Se	82	**-0.098**	ug/L	248.704	-15	-0.000
	Kr	83		ug/L		48	0.000
	Sr	88	**0.008**	ug/L	34.668	171	0.000
	Y	89		ug/L		27	0.000
	Zr	90	**0.164**	ug/L	32.614	680	0.005
	Mo	98	**0.001**	ug/L	1311.947	44	0.000
	Ag	107	**-0.002**	ug/L	195.602	43	-0.000
	Cd	111	**-0.008**	ug/L	99.674	9	-0.000
	Cd	114		ug/L		11	-0.000
>	In	115		ug/L		71744	71743.712
	Sn	120	**0.219**	ug/L	19.543	541	0.005
	Sb	121	**0.154**	ug/L	25.738	430	0.003
	Sb	123		ug/L		340	0.002
	Ba	135		ug/L		25	0.000
	Ba	137	**-0.002**	ug/L	195.675	28	-0.000
	Ho	165		ug/L		9	0.000
>	Lu	175		ug/L		66619	66618.636
	Tl	205	**-0.031**	ug/L	26.296	39	-0.000
	Pb	208	**-0.024**	ug/L	26.033	273	-0.001
	Bi	209		ug/L		13	-0.000
	Th	232	**0.005**	ug/L	155.506	388	0.000
	U	238	**-0.027**	ug/L	0.980	27	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	V	51	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202011704
Sample Date/Time: Thursday, January 14, 2010 00:32:28
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 940082|1|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\1202011704.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**53.212**	ug/L	6.806	6506	0.038
	Be	9	**55.451**	ug/L	2.319	2710	0.016
	B	11	**113.350**	ug/L	3.110	5618	0.033
	Na	23	**2153.448**	ug/L	18.439	2680470	15.497
	Mg	24	**1933.112**	ug/L	5.774	1615991	9.502
	Al	27	**1932.643**	ug/L	4.730	2285580	13.468
	P	31	**1990.829**	ug/L	0.436	119065	0.685
	K	39	**1907.424**	ug/L	7.296	4404193	23.705
	Ca	43	**1950.110**	ug/L	1.310	8350	0.047
>	Sc	45		ug/L		169773	169772.507
	Ti	47	**43.745**	ug/L	2.515	8538	0.049
	V	51	**33.573**	ug/L	1.918	51897	0.343
	Cr	52	**52.327**	ug/L	2.840	93990	0.541
	Cr	53		ug/L		299220	0.897
	Mn	55	**49.346**	ug/L	1.318	142390	0.833
	Fe	57	**1951.733**	ug/L	1.504	114481	0.659
	Co	59	**48.888**	ug/L	1.173	101672	0.598
	Ni	60	**49.425**	ug/L	0.823	21509	0.126
	Cu	63		ug/L		48843	0.287
	Cu	65	**49.719**	ug/L	1.156	23148	0.136
	Zn	66	**48.533**	ug/L	2.458	12211	0.103
	Zn	67		ug/L		18809	0.089
	Zn	68		ug/L		9859	0.077
>	Ge	74		ug/L		117520	117519.589
	As	75	**50.698**	ug/L	4.346	15305	0.129
	Se	77		ug/L		18330	0.105
	Se	82	**48.428**	ug/L	1.300	1363	0.012
	Kr	83		ug/L		53	0.000
	Sr	88	**49.344**	ug/L	2.638	209448	2.933
	Y	89		ug/L		41	0.000
	Zr	90	**48.649**	ug/L	2.099	113036	1.580
	Mo	98	**48.460**	ug/L	1.947	48704	0.682
	Ag	107	**49.572**	ug/L	0.485	78700	1.102
	Cd	111	**49.005**	ug/L	0.862	18435	0.258
	Cd	114		ug/L		42877	0.600
>	In	115		ug/L		71384	71384.083
	Sn	120	**48.168**	ug/L	1.958	82057	1.147
	Sb	121	**51.829**	ug/L	2.858	67780	0.947
	Sb	123		ug/L		52314	0.730
	Ba	135		ug/L		18273	0.269
	Ba	137	**47.304**	ug/L	1.082	31354	0.462
	Ho	165		ug/L		11	0.000
>	Lu	175		ug/L		67766	67766.377
	Tl	205	**45.323**	ug/L	2.764	26323	0.388
	Pb	208	**49.839**	ug/L	1.263	207447	3.056
	Bi	209		ug/L		160231	2.364
	Th	232	**48.445**	ug/L	1.049	274277	4.042
	U	238	**50.671**	ug/L	2.101	299393	4.416

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		96.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 14, 2010 01:03:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 6.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.054**	ug/L	7.865	6684	0.039
	Be	9	**54.404**	ug/L	1.709	2689	0.016
	B	11	**102.776**	ug/L	1.784	5158	0.030
	Na	23	**5285.394**	ug/L	6.672	6583484	38.036
	Mg	24	**4784.615**	ug/L	2.882	4041435	23.519
	Al	27	**4956.095**	ug/L	1.787	5930757	34.537
	P	31	**5022.535**	ug/L	1.258	299641	1.729
	K	39	**4726.667**	ug/L	6.340	10469617	58.743
	Ca	43	**4993.198**	ug/L	1.531	20997	0.120
>	Sc	45		ug/L		171720	171720.277
	Ti	47	**50.252**	ug/L	2.562	9901	0.057
	V	51	**46.767**	ug/L	12.247	75741	0.478
	Cr	52	**51.355**	ug/L	1.451	93360	0.531
	Cr	53		ug/L		185776	0.217
	Mn	55	**50.873**	ug/L	0.826	148462	0.859
	Fe	57	**4918.367**	ug/L	1.767	287701	1.660
	Co	59	**49.242**	ug/L	1.286	103576	0.603
	Ni	60	**51.387**	ug/L	1.834	22613	0.131
	Cu	63		ug/L		49370	0.287
	Cu	65	**50.285**	ug/L	1.281	23677	0.137
	Zn	66	**50.995**	ug/L	1.436	12739	0.109
	Zn	67		ug/L		11291	0.025
	Zn	68		ug/L		9826	0.078
>	Ge	74		ug/L		116713	116713.004
	As	75	**47.997**	ug/L	3.833	14396	0.122
	Se	77		ug/L		9243	0.029
	Se	82	**49.667**	ug/L	0.910	1388	0.012
	Kr	83		ug/L		53	0.000
	Sr	88	**50.793**	ug/L	1.051	221163	3.019
	Y	89		ug/L		75	0.001
	Zr	90	**48.629**	ug/L	1.588	115910	1.579
	Mo	98	**49.098**	ug/L	1.003	50615	0.691
	Ag	107	**48.440**	ug/L	1.541	78882	1.077
	Cd	111	**50.398**	ug/L	1.785	19445	0.265
	Cd	114		ug/L		45460	0.621
>	In	115		ug/L		73214	73214.255
	Sn	120	**49.120**	ug/L	1.331	85826	1.170
	Sb	121	**49.164**	ug/L	2.926	65970	0.898
	Sb	123		ug/L		50449	0.686
	Ba	135		ug/L		19535	0.279
	Ba	137	**49.021**	ug/L	1.248	33522	0.479
	Ho	165		ug/L		16	0.000
>	Lu	175		ug/L		69911	69911.013
	Tl	205	**45.072**	ug/L	1.671	27004	0.385
	Pb	208	**50.469**	ug/L	0.732	216724	3.094
	Bi	209		ug/L		49	0.000
	Th	232	**49.962**	ug/L	0.401	291835	4.169
	U	238	**51.665**	ug/L	1.350	314986	4.503

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	108.108				
	Be	9	108.808				
	B	11	102.776				
	Na	23	105.708				
	Mg	24	95.692				
	Al	27	98.140				
	P	31	100.451				
	K	39	94.533				
	Ca	43	99.864				
>	Sc	45		100.3			
	Ti	47	100.504				
	V	51	93.533				
	Cr	52	102.709				
	Cr	53					
	Mn	55	101.746				
	Fe	57	98.367				
	Co	59	98.483				
	Ni	60	102.774				
	Cu	63					
	Cu	65	100.571				
	Zn	66	101.990				
	Zn	67					
	Zn	68					
>	Ge	74		99.2			
	As	75	95.995				
	Se	77					
	Se	82	99.335				
	Kr	83					
	Sr	88	101.585				
	Y	89					
	Zr	90	97.257				
	Mo	98	98.196				
	Ag	107	96.881				
	Cd	111	100.796				
	Cd	114					
>	In	115		97.1			
	Sn	120	98.241				
	Sb	121	98.327				
	Sb	123					
	Ba	135					
	Ba	137	98.043				
	Ho	165					
>	Lu	175		99.7			
	Tl	205	90.143				
	Pb	208	100.938				
	Bi	209					
	Th	232	99.924				
	U	238	103.331				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 14, 2010 01:09:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 7.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.017**	ug/L	177.865	25	0.000
	Be	9	**0.012**	ug/L	327.701	5	0.000
	B	11	**2.355**	ug/L	15.203	182	0.001
	Na	23	**-16.779**	ug/L	24.751	25023	-0.121
	Mg	24	**-0.405**	ug/L	781.826	3000	-0.002
	Al	27	**3.336**	ug/L	77.151	4668	0.023
	P	31	**-4.013**	ug/L	3.748	2524	-0.001
	K	39	**-1.009**	ug/L	660.235	388206	-0.013
	Ca	43	**-13.492**	ug/L	90.975	351	-0.000
>	Sc	45		ug/L		172813	172812.519
	Ti	47	**-0.064**	ug/L	184.254	169	-0.000
	V	51	**-0.479**	ug/L	630.898	-7317	-0.005
	Cr	52	**0.468**	ug/L	16.305	3106	0.005
	Cr	53		ug/L		152091	0.015
	Mn	55	**0.011**	ug/L	190.521	976	0.000
	Fe	57	**5.943**	ug/L	19.178	3049	0.002
	Co	59	**0.015**	ug/L	47.180	142	0.000
	Ni	60	**0.049**	ug/L	37.789	134	0.000
	Cu	63		ug/L		194	0.000
	Cu	65	**0.001**	ug/L	3845.607	103	0.000
	Zn	66	**0.072**	ug/L	28.025	76	0.000
	Zn	67		ug/L		7765	-0.005
	Zn	68		ug/L		675	-0.001
>	Ge	74		ug/L		116154	116154.172
	As	75	**-0.316**	ug/L	384.040	38	-0.001
	Se	77		ug/L		7047	0.010
	Se	82	**0.414**	ug/L	86.411	-1	0.000
	Kr	83		ug/L		41	-0.000
	Sr	88	**0.009**	ug/L	45.781	182	0.001
	Y	89		ug/L		18	0.000
	Zr	90	**0.154**	ug/L	15.910	680	0.005
	Mo	98	**0.036**	ug/L	27.095	82	0.001
	Ag	107	**0.018**	ug/L	29.126	79	0.000
	Cd	111	**0.017**	ug/L	114.668	19	0.000
	Cd	114		ug/L		35	0.000
>	In	115		ug/L		74485	74484.752
	Sn	120	**0.115**	ug/L	21.658	375	0.003
	Sb	121	**0.535**	ug/L	28.075	963	0.010
	Sb	123		ug/L		768	0.008
	Ba	135		ug/L		18	0.000
	Ba	137	**-0.000**	ug/L	747.307	30	-0.000
	Ho	165		ug/L		5	-0.000
>	Lu	175		ug/L		69306	69306.080
	Tl	205	**0.688**	ug/L	13.466	466	0.006
	Pb	208	**-0.000**	ug/L	4433.730	386	-0.000
	Bi	209		ug/L		14	0.000
	Th	232	**0.170**	ug/L	31.544	1356	0.014
	U	238	**0.016**	ug/L	20.015	293	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		98.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 14, 2010 01:53:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 6.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**57.756**	ug/L	6.895	7067	0.041
	Be	9	**56.317**	ug/L	3.933	2754	0.016
	B	11	**108.648**	ug/L	4.327	5390	0.031
	Na	23	**5008.770**	ug/L	4.819	6167963	36.045
	Mg	24	**4945.775**	ug/L	5.012	4133048	24.311
	Al	27	**5156.152**	ug/L	5.925	6101407	35.932
	P	31	**5000.604**	ug/L	1.237	295190	1.721
	K	39	**4829.980**	ug/L	1.273	10582545	60.027
	Ca	43	**4980.693**	ug/L	1.323	20730	0.120
>	Sc	45		ug/L		169914	169914.475
	Ti	47	**49.265**	ug/L	1.923	9604	0.055
	V	51	**49.140**	ug/L	4.421	79062	0.503
	Cr	52	**50.589**	ug/L	1.266	91038	0.523
	Cr	53		ug/L		183097	0.212
	Mn	55	**50.226**	ug/L	3.439	145013	0.848
	Fe	57	**4883.089**	ug/L	2.387	282664	1.648
	Co	59	**48.954**	ug/L	1.299	101895	0.599
	Ni	60	**51.333**	ug/L	1.256	22352	0.131
	Cu	63		ug/L		48705	0.286
	Cu	65	**49.591**	ug/L	2.723	23102	0.135
	Zn	66	**50.697**	ug/L	0.672	12530	0.108
	Zn	67		ug/L		11010	0.024
	Zn	68		ug/L		9535	0.076
>	Ge	74		ug/L		115455	115454.829
	As	75	**47.248**	ug/L	2.081	14018	0.120
	Se	77		ug/L		9590	0.032
	Se	82	**49.822**	ug/L	4.583	1377	0.012
	Kr	83		ug/L		43	-0.000
	Sr	88	**51.209**	ug/L	1.305	219605	3.044
	Y	89		ug/L		69	0.001
	Zr	90	**47.702**	ug/L	2.765	111971	1.549
	Mo	98	**48.441**	ug/L	1.592	49183	0.681
	Ag	107	**48.743**	ug/L	2.006	78174	1.083
	Cd	111	**49.766**	ug/L	1.350	18913	0.262
	Cd	114		ug/L		44663	0.619
>	In	115		ug/L		72115	72114.792
	Sn	120	**48.837**	ug/L	1.780	84050	1.163
	Sb	121	**48.308**	ug/L	4.280	63851	0.882
	Sb	123		ug/L		49531	0.684
	Ba	135		ug/L		19113	0.277
	Ba	137	**48.780**	ug/L	1.395	32865	0.477
	Ho	165		ug/L		12	0.000
>	Lu	175		ug/L		68883	68882.700
	Tl	205	**43.334**	ug/L	3.566	25577	0.371
	Pb	208	**50.441**	ug/L	1.972	213397	3.093
	Bi	209		ug/L		58	0.001
	Th	232	**50.095**	ug/L	1.544	288277	4.180
	U	238	**51.692**	ug/L	1.600	310494	4.505

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	115.512				
	Be	9	112.633				
	B	11	108.648				
	Na	23	100.175				
	Mg	24	98.916				
	Al	27	102.102				
	P	31	100.012				
	K	39	96.600				
	Ca	43	99.614				
>	Sc	45			99.3		
	Ti	47	98.529				
	V	51	98.280				
	Cr	52	101.177				
	Cr	53					
	Mn	55	100.452				
	Fe	57	97.662				
	Co	59	97.908				
	Ni	60	102.666				
	Cu	63					
	Cu	65	99.182				
	Zn	66	101.394				
	Zn	67					
	Zn	68					
>	Ge	74			98.1		
	As	75	94.496				
	Se	77					
	Se	82	99.643				
	Kr	83					
	Sr	88	102.417				
	Y	89					
	Zr	90	95.404				
	Mo	98	96.882				
	Ag	107	97.487				
	Cd	111	99.531				
	Cd	114					
>	In	115			95.6		
	Sn	120	97.674				
	Sb	121	96.615				
	Sb	123					
	Ba	135					
	Ba	137	97.561				
	Ho	165					
>	Lu	175			98.3		
	Tl	205	86.668				
	Pb	208	100.881				
	Bi	209					
	Th	232	100.191				
	U	238	103.384				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	Tl	205	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 14, 2010 01:59:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 7.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.020	ug/L	218.117	25	0.000
	Be	9	0.029	ug/L	216.538	5	0.000
	B	11	2.296	ug/L	32.472	174	0.001
	Na	23	-18.397	ug/L	59.447	22355	-0.132
	Mg	24	-1.132	ug/L	124.899	2334	-0.006
	Al	27	1.986	ug/L	112.146	3000	0.014
	P	31	-2.475	ug/L	47.185	2546	-0.001
	K	39	-3.368	ug/L	170.529	373148	-0.042
	Ca	43	-6.392	ug/L	53.198	371	-0.000
>	Sc	45		ug/L		168239	168238.970
	Ti	47	-0.084	ug/L	153.500	161	-0.000
	V	51	-2.508	ug/L	64.659	-10656	-0.026
	Cr	52	0.688	ug/L	20.361	3404	0.007
	Cr	53		ug/L		153117	0.044
	Mn	55	0.016	ug/L	127.823	965	0.000
	Fe	57	5.981	ug/L	17.980	2971	0.002
	Co	59	0.011	ug/L	45.349	129	0.000
	Ni	60	0.015	ug/L	63.444	116	0.000
	Cu	63		ug/L		178	0.000
	Cu	65	-0.016	ug/L	289.718	93	-0.000
	Zn	66	0.087	ug/L	91.309	79	0.000
	Zn	67		ug/L		7730	-0.004
	Zn	68		ug/L		660	-0.001
>	Ge	74		ug/L		115162	115161.529
	As	75	-0.718	ug/L	46.140	-80	-0.002
	Se	77		ug/L		7229	0.012
	Se	82	0.018	ug/L	2814.039	-12	0.000
	Kr	83		ug/L		45	-0.000
	Sr	88	0.013	ug/L	18.974	194	0.001
	Y	89		ug/L		14	0.000
	Zr	90	0.156	ug/L	29.484	674	0.005
	Mo	98	0.039	ug/L	17.096	85	0.001
	Ag	107	0.015	ug/L	63.614	72	0.000
	Cd	111	0.007	ug/L	43.190	15	0.000
	Cd	114		ug/L		30	0.000
>	In	115		ug/L		73412	73412.481
	Sn	120	0.105	ug/L	23.692	352	0.002
	Sb	121	0.494	ug/L	25.674	894	0.009
	Sb	123		ug/L		752	0.008
	Ba	135		ug/L		20	0.000
	Ba	137	-0.003	ug/L	226.199	28	-0.000
	Ho	165		ug/L		5	-0.000
>	Lu	175		ug/L		68996	68995.948
	Tl	205	0.820	ug/L	16.070	541	0.007
	Pb	208	-0.003	ug/L	199.610	370	-0.000
	Bi	209		ug/L		15	0.000
	Th	232	0.178	ug/L	31.772	1399	0.015
	U	238	0.015	ug/L	7.578	282	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			98.3		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			98.4		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244226001
Sample Date/Time: Thursday, January 14, 2010 02:12:18
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940082|1|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\244226001.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.286**	ug/L	14.520	56	0.000
	Be	9	**-0.004**	ug/L	256.421	4	-0.000
	B	11	**25.588**	ug/L	1.864	1287	0.007
	Na	23	**70.488**	ug/L	14.523	128244	0.507
	Mg	24	**2.175**	ug/L	113.031	5001	0.011
	Al	27	**10.416**	ug/L	25.050	12672	0.073
	P	31	**-7.925**	ug/L	13.923	2200	-0.003
	K	39	**112.876**	ug/L	9.505	607663	1.403
	Ca	43	**49.799**	ug/L	22.385	589	0.001
>	Sc	45		ug/L		165930	165929.784
	Ti	47	**0.548**	ug/L	11.090	277	0.001
	V	51	**-13.825**	ug/L	58.712	-29644	-0.141
	Cr	52	**5.296**	ug/L	3.472	11258	0.055
	Cr	53		ug/L		296172	0.919
	Mn	55	**0.624**	ug/L	3.637	2658	0.011
	Fe	57	**19.252**	ug/L	2.897	3674	0.006
	Co	59	**-0.007**	ug/L	105.572	92	-0.000
	Ni	60	**-0.086**	ug/L	10.961	72	-0.000
	Cu	63		ug/L		1086	0.006
	Cu	65	**1.018**	ug/L	7.680	560	0.003
	Zn	66	**1.468**	ug/L	6.590	416	0.003
	Zn	67		ug/L		17239	0.079
	Zn	68		ug/L		1441	0.006
>	Ge	74		ug/L		114624	114623.521
	As	75	**1.343**	ug/L	86.676	521	0.003
	Se	77		ug/L		18912	0.114
	Se	82	**-0.304**	ug/L	122.969	-21	-0.000
	Kr	83		ug/L		52	0.000
	Sr	88	**0.069**	ug/L	6.042	418	0.004
	Y	89		ug/L		47	0.000
	Zr	90	**0.020**	ug/L	54.169	333	0.001
	Mo	98	**-0.020**	ug/L	18.474	22	-0.000
	Ag	107	**-0.004**	ug/L	144.173	40	-0.000
	Cd	111	**-0.028**	ug/L	20.926	1	-0.000
	Cd	114		ug/L		12	-0.000
>	In	115		ug/L		69897	69897.400
	Sn	120	**0.038**	ug/L	24.869	224	0.001
	Sb	121	**-0.036**	ug/L	53.370	176	-0.001
	Sb	123		ug/L		162	-0.000
	Ba	135		ug/L		80	0.001
	Ba	137	**0.163**	ug/L	6.137	134	0.002
	Ho	165		ug/L		7	0.000
>	Lu	175		ug/L		66154	66153.515
	Tl	205	**0.134**	ug/L	10.020	132	0.001
	Pb	208	**0.031**	ug/L	18.527	495	0.002
	Bi	209		ug/L		18	0.000
	Th	232	**-0.008**	ug/L	98.825	315	-0.001
	U	238	**-0.026**	ug/L	6.334	33	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			96.9		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.4		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			92.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			94.4		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	V	51	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 244226002
Sample Date/Time: Thursday, January 14, 2010 02:18:34
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940082|1|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\244226002.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.214**	ug/L	8.670	47	0.000
	Be	9	**0.004**	ug/L	1552.526	4	0.000
	B	11	**26.446**	ug/L	2.999	1314	0.008
	Na	23	**40.430**	ug/L	12.483	91292	0.291
	Mg	24	**1.006**	ug/L	126.610	4001	0.005
	Al	27	**4.130**	ug/L	35.637	5334	0.029
	P	31	**-8.825**	ug/L	15.723	2127	-0.003
	K	39	**126.359**	ug/L	21.017	627865	1.570
	Ca	43	**64.577**	ug/L	16.849	641	0.002
>	Sc	45		ug/L		164166	164166.281
	Ti	47	**0.538**	ug/L	14.377	272	0.001
	V	51	**-13.673**	ug/L	16.554	-29215	-0.140
	Cr	52	**5.243**	ug/L	6.274	11040	0.054
	Cr	53		ug/L		297426	0.946
	Mn	55	**0.676**	ug/L	2.854	2773	0.011
	Fe	57	**16.373**	ug/L	13.500	3474	0.006
	Co	59	**-0.005**	ug/L	201.710	95	-0.000
	Ni	60	**0.003**	ug/L	2101.185	108	0.000
	Cu	63		ug/L		1093	0.006
	Cu	65	**0.948**	ug/L	10.233	522	0.003
	Zn	66	**1.368**	ug/L	11.004	389	0.003
	Zn	67		ug/L		17478	0.082
	Zn	68		ug/L		1402	0.006
>	Ge	74		ug/L		113902	113902.093
	As	75	**5.396**	ug/L	36.951	1692	0.014
	Se	77		ug/L		19240	0.118
	Se	82	**-0.014**	ug/L	415.219	-13	-0.000
	Kr	83		ug/L		45	-0.000
	Sr	88	**0.080**	ug/L	7.889	459	0.005
	Y	89		ug/L		42	0.000
	Zr	90	**-0.021**	ug/L	38.558	239	-0.001
	Mo	98	**-0.019**	ug/L	23.298	23	-0.000
	Ag	107	**-0.007**	ug/L	96.678	35	-0.000
	Cd	111	**-0.013**	ug/L	104.683	7	-0.000
	Cd	114		ug/L		12	-0.000
>	In	115		ug/L		69306	69306.021
	Sn	120	**0.044**	ug/L	5.579	233	0.001
	Sb	121	**-0.023**	ug/L	22.570	192	-0.000
	Sb	123		ug/L		171	-0.000
	Ba	135		ug/L		127	0.002
	Ba	137	**0.292**	ug/L	3.300	216	0.003
	Ho	165		ug/L		6	0.000
>	Lu	175		ug/L		65722	65721.828
	Tl	205	**0.072**	ug/L	50.730	96	0.001
	Pb	208	**0.032**	ug/L	15.097	497	0.002
	Bi	209		ug/L		13	-0.000
	Th	232	**-0.022**	ug/L	18.787	234	-0.002
	U	238	**-0.028**	ug/L	0.780	25	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	V	51	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 14, 2010 02:43:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 6.199

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**68.118**	**ug/L**	6.724	7901	0.049
	Be	9	**61.565**	**ug/L**	4.757	2854	0.018
	B	11	**114.881**	**ug/L**	0.243	5403	0.033
	Na	23	**5050.267**	**ug/L**	9.634	5894151	36.344
	Mg	24	**5282.392**	**ug/L**	11.877	4188015	25.965
	Al	27	**4890.988**	**ug/L**	1.148	5491546	34.084
	P	31	**5002.995**	**ug/L**	1.336	280036	1.722
	K	39	**4874.901**	**ug/L**	2.164	10124889	60.585
	Ca	43	**4880.351**	**ug/L**	0.334	19264	0.117
>	Sc	45		**ug/L**		161098	161097.566
	Ti	47	**49.409**	**ug/L**	1.300	9132	0.056
	V	51	**46.609**	**ug/L**	2.847	70751	0.477
	Cr	52	**51.932**	**ug/L**	0.853	88566	0.537
	Cr	53		**ug/L**		189490	0.311
	Mn	55	**50.908**	**ug/L**	0.389	139386	0.860
	Fe	57	**4939.009**	**ug/L**	0.441	271091	1.667
	Co	59	**49.581**	**ug/L**	1.319	97855	0.607
	Ni	60	**51.474**	**ug/L**	0.579	21254	0.131
	Cu	63		**ug/L**		46394	0.287
	Cu	65	**50.232**	**ug/L**	1.018	22193	0.137
	Zn	66	**50.236**	**ug/L**	0.886	11994	0.107
	Zn	67		**ug/L**		10811	0.026
	Zn	68		**ug/L**		9274	0.077
>	Ge	74		**ug/L**		111538	111537.518
	As	75	**49.801**	**ug/L**	2.674	14268	0.127
	Se	77		**ug/L**		11120	0.049
	Se	82	**50.401**	**ug/L**	1.561	1346	0.012
	Kr	83		**ug/L**		43	-0.000
	Sr	88	**51.015**	**ug/L**	0.368	211883	3.032
	Y	89		**ug/L**		78	0.001
	Zr	90	**47.826**	**ug/L**	1.309	108738	1.553
	Mo	98	**48.364**	**ug/L**	0.838	47557	0.680
	Ag	107	**47.956**	**ug/L**	1.012	74484	1.066
	Cd	111	**49.657**	**ug/L**	0.470	18277	0.262
	Cd	114		**ug/L**		42928	0.614
>	In	115		**ug/L**		69839	69839.156
	Sn	120	**48.089**	**ug/L**	0.370	80160	1.145
	Sb	121	**47.740**	**ug/L**	3.198	61119	0.872
	Sb	123		**ug/L**		47385	0.676
	Ba	135		**ug/L**		18076	0.269
	Ba	137	**47.539**	**ug/L**	1.428	31192	0.465
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		67083	67083.147
	Tl	205	**44.215**	**ug/L**	1.039	25419	0.378
	Pb	208	**50.728**	**ug/L**	1.212	209012	3.110
	Bi	209		**ug/L**		51	0.001
	Th	232	**50.151**	**ug/L**	0.927	281074	4.185
	U	238	**51.909**	**ug/L**	0.623	303656	4.524

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	136.236				
|	Be	9	123.130				
|	B	11	114.881				
|	Na	23	101.005				
|	Mg	24	105.648				
|	Al	27	96.851				
|	P	31	100.060				
|	K	39	97.498				
|	Ca	43	97.607				
|>	Sc	45		94.1			
|	Ti	47	98.818				
|	V	51	93.218				
|	Cr	52	103.865				
|	Cr	53					
|	Mn	55	101.816				
|	Fe	57	98.780				
|	Co	59	99.162				
|	Ni	60	102.948				
|	Cu	63					
⌊	Cu	65	100.465				
⌈	Zn	66	100.472				
|	Zn	67					
|	Zn	68					
|>	Ge	74		94.8			
|	As	75	99.602				
|	Se	77					
|	Se	82	100.801				
⌊	Kr	83					
⌈	Sr	88	102.030				
|	Y	89					
|	Zr	90	95.653				
|	Mo	98	96.727				
|	Ag	107	95.912				
|	Cd	111	99.314				
|	Cd	114					
|>	In	115		92.6			
|	Sn	120	96.178				
|	Sb	121	95.479				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	95.078				
|	Ho	165					
|>	Lu	175		95.7			
|	Tl	205	88.431				
|	Pb	208	101.456				
|	Bi	209					
|	Th	232	100.302				
⌊	U	238	103.818				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	B	11	CCV is out of limits (+/- 10%)
QC Std 6	Tl	205	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 14, 2010 02:49:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 7.200

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.035**	**ug/L**	104.498	26	0.000
	Be	9	**0.012**	**ug/L**	90.407	4	0.000
	B	11	**2.338**	**ug/L**	22.292	169	0.001
	Na	23	**-17.356**	**ug/L**	28.815	22686	-0.125
	Mg	24	**-0.635**	**ug/L**	294.065	2667	-0.003
	Al	27	**2.071**	**ug/L**	144.822	3001	0.014
	P	31	**-5.311**	**ug/L**	48.715	2285	-0.002
	K	39	**-16.459**	**ug/L**	27.766	332158	-0.205
	Ca	43	**-12.614**	**ug/L**	107.004	331	-0.000
>	Sc	45		**ug/L**		161540	161540.307
	Ti	47	**-0.095**	**ug/L**	19.766	152	-0.000
	V	51	**-0.472**	**ug/L**	459.375	-6821	-0.005
	Cr	52	**1.446**	**ug/L**	4.105	4532	0.015
	Cr	53		**ug/L**		159702	0.124
	Mn	55	**0.061**	**ug/L**	34.258	1048	0.001
	Fe	57	**4.955**	**ug/L**	49.946	2794	0.002
	Co	59	**0.012**	**ug/L**	26.878	128	0.000
	Ni	60	**0.007**	**ug/L**	344.437	108	0.000
	Cu	63		**ug/L**		169	0.000
	Cu	65	**-0.040**	**ug/L**	62.974	79	-0.000
	Zn	66	**0.066**	**ug/L**	109.059	72	0.000
	Zn	67		**ug/L**		7610	-0.003
	Zn	68		**ug/L**		585	-0.001
>	Ge	74		**ug/L**		111716	111716.267
	As	75	**1.520**	**ug/L**	27.556	559	0.004
	Se	77		**ug/L**		8677	0.027
	Se	82	**0.249**	**ug/L**	94.138	-5	0.000
	Kr	83		**ug/L**		42	-0.000
	Sr	88	**0.012**	**ug/L**	31.045	181	0.001
	Y	89		**ug/L**		14	0.000
	Zr	90	**0.166**	**ug/L**	11.597	663	0.005
	Mo	98	**0.064**	**ug/L**	13.165	104	0.001
	Ag	107	**0.012**	**ug/L**	50.214	65	0.000
	Cd	111	**0.029**	**ug/L**	74.265	22	0.000
	Cd	114		**ug/L**		32	0.000
>	In	115		**ug/L**		69740	69740.035
	Sn	120	**0.122**	**ug/L**	35.589	364	0.003
	Sb	121	**0.483**	**ug/L**	18.077	837	0.009
	Sb	123		**ug/L**		699	0.007
	Ba	135		**ug/L**		13	-0.000
	Ba	137	**0.003**	**ug/L**	280.538	30	0.000
	Ho	165		**ug/L**		6	0.000
>	Lu	175		**ug/L**		65565	65564.770
	Tl	205	**0.712**	**ug/L**	15.638	454	0.006
	Pb	208	**-0.002**	**ug/L**	256.354	359	-0.000
	Bi	209		**ug/L**		9	-0.000
	Th	232	**0.183**	**ug/L**	27.547	1358	0.015
	U	238	**0.014**	**ug/L**	24.461	266	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		94.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		93.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011705
Sample Date/Time: Thursday, January 14, 2010 03:14:51
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 940082|1|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\1202011705.204

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.942**	ug/L	7.230	600	0.004
	Be	9	**0.147**	ug/L	94.204	11	0.000
	B	11	**22.404**	ug/L	3.020	1114	0.006
	Na	23	**22366.813**	ug/L	6.356	26285898	160.962
	Mg	24	**3576.800**	ug/L	6.105	2868791	17.582
	Al	27	**25.843**	ug/L	19.029	30032	0.180
	P	31	**36.495**	ug/L	2.712	4651	0.013
	K	39	**5038.467**	ug/L	6.163	10564714	62.618
	Ca	43	**11844.800**	ug/L	1.574	46730	0.284
>	Sc	45		ug/L		162922	162921.542
	Ti	47	**3.068**	ug/L	8.982	734	0.003
	V	51	**-21.530**	ug/L	41.961	-42126	-0.220
	Cr	52	**15.142**	ug/L	0.548	27629	0.156
	Cr	53		ug/L		302845	0.993
	Mn	55	**0.727**	ug/L	4.139	2892	0.012
	Fe	57	**51.406**	ug/L	6.168	5375	0.017
	Co	59	**0.067**	ug/L	12.763	237	0.001
	Ni	60	**0.335**	ug/L	17.411	246	0.001
	Cu	63		ug/L		1264	0.007
	Cu	65	**0.834**	ug/L	1.071	468	0.002
	Zn	66	**2.635**	ug/L	2.199	657	0.006
	Zn	67		ug/L		16637	0.083
	Zn	68		ug/L		1575	0.008
>	Ge	74		ug/L		107412	107412.388
	As	75	**4.279**	ug/L	61.868	1288	0.011
	Se	77		ug/L		23044	0.164
	Se	82	**0.446**	ug/L	63.990	-0	0.000
	Kr	83		ug/L		44	-0.000
	Sr	88	**94.019**	ug/L	1.620	365110	5.588
	Y	89		ug/L		6292	0.096
	Zr	90	**0.042**	ug/L	41.149	359	0.001
	Mo	98	**1.843**	ug/L	3.110	1733	0.026
	Ag	107	**-0.004**	ug/L	55.762	38	-0.000
	Cd	111	**-0.029**	ug/L	87.901	1	-0.000
	Cd	114		ug/L		11	-0.000
>	In	115		ug/L		65324	65323.901
	Sn	120	**0.438**	ug/L	7.913	832	0.010
	Sb	121	**-0.022**	ug/L	52.921	182	-0.000
	Sb	123		ug/L		174	0.000
	Ba	135		ug/L		7850	0.122
	Ba	137	**21.276**	ug/L	1.576	13385	0.208
	Ho	165		ug/L		198	0.003
>	Lu	175		ug/L		64249	64249.480
	Tl	205	**0.062**	ug/L	43.432	88	0.001
	Pb	208	**-0.032**	ug/L	10.871	233	-0.002
	Bi	209		ug/L		13	0.000
	Th	232	**-0.012**	ug/L	6.223	282	-0.001
	U	238	**0.621**	ug/L	4.869	3658	0.054

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			95.2		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			91.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			86.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			91.6		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	V	51	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202011706
Sample Date/Time: Thursday, January 14, 2010 03:21:09
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 940082|1|skj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\1202011706.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**76.725**	ug/L	4.123	8933	0.055
	Be	9	**63.789**	ug/L	2.089	2970	0.018
	B	11	**143.406**	ug/L	3.068	6757	0.041
	Na	23	**22806.040**	ug/L	1.430	26593335	164.123
	Mg	24	**5354.946**	ug/L	8.272	4258688	26.322
	Al	27	**1752.433**	ug/L	12.436	1977155	12.212
	P	31	**1869.404**	ug/L	1.435	106667	0.644
	K	39	**6817.784**	ug/L	2.294	14068455	84.731
	Ca	43	**13654.696**	ug/L	1.352	53425	0.328
>	Sc	45		ug/L		161761	161761.477
	Ti	47	**44.257**	ug/L	1.722	8230	0.050
	V	51	**28.960**	ug/L	17.456	41734	0.296
	Cr	52	**59.335**	ug/L	2.352	101274	0.613
	Cr	53		ug/L		296325	0.966
	Mn	55	**45.234**	ug/L	1.376	124444	0.764
	Fe	57	**1836.569**	ug/L	1.745	102798	0.620
	Co	59	**44.942**	ug/L	1.798	89056	0.550
	Ni	60	**45.906**	ug/L	1.745	19041	0.117
	Cu	63		ug/L		43846	0.270
	Cu	65	**46.697**	ug/L	2.847	20717	0.128
	Zn	66	**50.657**	ug/L	1.588	11394	0.108
	Zn	67		ug/L		18168	0.101
	Zn	68		ug/L		9259	0.082
>	Ge	74		ug/L		105087	105087.182
	As	75	**77.544**	ug/L	3.435	20862	0.197
	Se	77		ug/L		21638	0.155
	Se	82	**19.169**	ug/L	7.487	475	0.005
	Kr	83		ug/L		49	0.000
	Sr	88	**145.265**	ug/L	1.436	551735	8.634
	Y	89		ug/L		6232	0.097
	Zr	90	**49.329**	ug/L	1.316	102592	1.602
	Mo	98	**49.928**	ug/L	0.879	44926	0.702
	Ag	107	**48.453**	ug/L	3.453	68834	1.077
	Cd	111	**10.319**	ug/L	1.838	3483	0.054
	Cd	114		ug/L		7880	0.123
>	In	115		ug/L		63900	63900.047
	Sn	120	**49.042**	ug/L	1.267	74781	1.168
	Sb	121	**213.589**	ug/L	1.660	249403	3.901
	Sb	123		ug/L		191318	2.992
	Ba	135		ug/L		23921	0.374
	Ba	137	**66.729**	ug/L	0.551	41666	0.652
	Ho	165		ug/L		253	0.004
>	Lu	175		ug/L		63853	63852.688
	Tl	205	**80.070**	ug/L	4.640	43779	0.685
	Pb	208	**39.066**	ug/L	1.597	153301	2.395
	Bi	209		ug/L		56	0.001
	Th	232	**48.690**	ug/L	0.101	259764	4.063
	U	238	**51.474**	ug/L	0.461	286620	4.486

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			94.5		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			89.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			84.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			91.1		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011707
Sample Date/Time: Thursday, January 14, 2010 03:27:25
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 940082|1|sk| 5 EAG 1/25/10
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\1202011707.206

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1.032**	**ug/L**	1.705	134	0.001
	Be	9	**0.032**	**ug/L**	211.217	5	0.000
	B	11	**6.648**	**ug/L**	10.706	351	0.002
	Na	23	**4674.040**	**ug/L**	4.562	5190408	33.637
	Mg	24	**669.234**	**ug/L**	1.795	506490	3.290
	Al	27	**6.638**	**ug/L**	30.139	7669	0.046
	P	31	**-2.590**	**ug/L**	54.647	2311	-0.001
	K	39	**1078.712**	**ug/L**	3.547	2398235	13.406
	Ca	43	**2477.594**	**ug/L**	3.936	9471	0.060
>	Sc	45		**ug/L**		153070	153069.572
	Ti	47	**0.608**	**ug/L**	14.063	265	0.001
	V	51	**-8.080**	**ug/L**	9.207	-18423	-0.083
	Cr	52	**3.254**	**ug/L**	2.719	7157	0.034
	Cr	53		**ug/L**		176849	0.290
	Mn	55	**0.151**	**ug/L**	4.056	1229	0.003
	Fe	57	**8.648**	**ug/L**	5.992	2841	0.003
	Co	59	**0.011**	**ug/L**	26.689	118	0.000
	Ni	60	**-0.080**	**ug/L**	26.525	69	-0.000
	Cu	63		**ug/L**		265	0.001
	Cu	65	**0.051**	**ug/L**	66.531	113	0.000
	Zn	66	**0.724**	**ug/L**	9.042	214	0.002
	Zn	67		**ug/L**		8749	0.012
	Zn	68		**ug/L**		802	0.001
>	Ge	74		**ug/L**		104489	104489.251
	As	75	**2.719**	**ug/L**	79.253	838	0.007
	Se	77		**ug/L**		10201	0.047
	Se	82	**0.001**	**ug/L**	42489.260	-11	0.000
	Kr	83		**ug/L**		39	-0.000
	Sr	88	**18.398**	**ug/L**	1.156	72236	1.093
	Y	89		**ug/L**		1243	0.019
	Zr	90	**-0.044**	**ug/L**	13.000	178	-0.001
	Mo	98	**0.368**	**ug/L**	9.055	381	0.005
	Ag	107	**0.002**	**ug/L**	196.330	47	0.000
	Cd	111	**-0.022**	**ug/L**	14.418	3	-0.000
	Cd	114		**ug/L**		11	-0.000
>	In	115		**ug/L**		65956	65955.560
	Sn	120	**0.010**	**ug/L**	140.159	167	0.000
	Sb	121	**0.435**	**ug/L**	5.885	734	0.008
	Sb	123		**ug/L**		546	0.006
	Ba	135		**ug/L**		1588	0.025
	Ba	137	**4.174**	**ug/L**	1.010	2633	0.041
	Ho	165		**ug/L**		39	0.001
>	Lu	175		**ug/L**		63876	63875.804
	Tl	205	**1.562**	**ug/L**	14.956	906	0.013
	Pb	208	**-0.032**	**ug/L**	30.523	233	-0.002
	Bi	209		**ug/L**		10	-0.000
	Th	232	**0.081**	**ug/L**	28.005	777	0.007
	U	238	**0.117**	**ug/L**	11.152	828	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		88.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		87.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 14, 2010 03:39:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 6.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**74.346**	ug/L	6.627	8075	0.053
	Be	9	**61.392**	ug/L	1.926	2667	0.018
	B	11	**116.961**	ug/L	1.464	5152	0.034
	Na	23	**4876.433**	ug/L	3.367	5334519	35.093
	Mg	24	**4892.036**	ug/L	4.048	3630486	24.047
	Al	27	**4896.211**	ug/L	4.246	5147450	34.120
	P	31	**5026.558**	ug/L	1.270	263538	1.730
	K	39	**4977.455**	ug/L	2.865	9679120	61.859
	Ca	43	**4879.609**	ug/L	0.568	18043	0.117
>	Sc	45		ug/L		150912	150911.878
	Ti	47	**48.736**	ug/L	0.605	8441	0.055
	V	51	**43.953**	ug/L	5.944	62164	0.450
	Cr	52	**50.694**	ug/L	0.937	81037	0.524
	Cr	53		ug/L		171334	0.270
	Mn	55	**50.127**	ug/L	1.146	128580	0.847
	Fe	57	**4860.108**	ug/L	0.570	249921	1.641
	Co	59	**48.459**	ug/L	0.976	89585	0.593
	Ni	60	**51.062**	ug/L	1.657	19753	0.130
	Cu	63		ug/L		43366	0.286
	Cu	65	**49.229**	ug/L	2.206	20372	0.134
	Zn	66	**50.406**	ug/L	1.649	11069	0.107
	Zn	67		ug/L		9830	0.024
	Zn	68		ug/L		8531	0.077
>	Ge	74		ug/L		102604	102603.590
	As	75	**48.197**	ug/L	2.262	12703	0.123
	Se	77		ug/L		9863	0.046
	Se	82	**49.835**	ug/L	2.414	1224	0.012
	Kr	83		ug/L		46	0.000
	Sr	88	**50.090**	ug/L	1.116	195382	2.977
	Y	89		ug/L		70	0.001
	Zr	90	**46.999**	ug/L	3.500	100358	1.526
	Mo	98	**47.684**	ug/L	2.486	44038	0.671
	Ag	107	**47.602**	ug/L	0.638	69437	1.058
	Cd	111	**49.186**	ug/L	0.539	17001	0.259
	Cd	114		ug/L		39896	0.608
>	In	115		ug/L		65585	65585.455
	Sn	120	**48.443**	ug/L	1.197	75832	1.154
	Sb	121	**47.937**	ug/L	4.132	57627	0.875
	Sb	123		ug/L		44498	0.676
	Ba	135		ug/L		17188	0.267
	Ba	137	**46.753**	ug/L	1.713	29401	0.457
	Ho	165		ug/L		10	0.000
>	Lu	175		ug/L		64295	64295.367
	Tl	205	**45.862**	ug/L	1.950	25272	0.392
	Pb	208	**50.430**	ug/L	2.141	199122	3.092
	Bi	209		ug/L		41	0.000
	Th	232	**50.508**	ug/L	1.037	271288	4.214
	U	238	**52.410**	ug/L	0.338	293845	4.568

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	148.692				
	Be	9	122.783				
	B	11	116.961				
	Na	23	97.529				
	Mg	24	97.841				
	Al	27	96.955				
	P	31	100.531				
	K	39	99.549				
	Ca	43	97.592				
>	Sc	45			88.2		
	Ti	47	97.473				
	V	51	87.905				
	Cr	52	101.387				
	Cr	53					
	Mn	55	100.254				
	Fe	57	97.202				
	Co	59	96.917				
	Ni	60	102.124				
	Cu	63					
	Cu	65	98.459				
	Zn	66	100.812				
	Zn	67					
	Zn	68					
>	Ge	74			87.2		
	As	75	96.394				
	Se	77					
	Se	82	99.670				
	Kr	83					
	Sr	88	100.180				
	Y	89					
	Zr	90	93.998				
	Mo	98	95.368				
	Ag	107	95.203				
	Cd	111	98.371				
	Cd	114					
>	In	115			87.0		
	Sn	120	96.887				
	Sb	121	95.873				
	Sb	123					
	Ba	135					
	Ba	137	93.505				
	Ho	165					
>	Lu	175			91.7		
	Tl	205	91.725				
	Pb	208	100.860				
	Bi	209					
	Th	232	101.016				
	U	238	104.821				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	B	11CCV is out of limits (+/- 10%)
QC Std 6	V	51CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 14, 2010 03:46:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\100113\QC Std 7.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.049	ug/L	75.599	25	0.000
	Be	9	0.066	ug/L	87.201	6	0.000
	B	11	2.568	ug/L	16.008	166	0.001
	Na	23	-17.610	ug/L	19.683	20682	-0.127
	Mg	24	-0.787	ug/L	99.391	2334	-0.004
	Al	27	0.088	ug/L	1270.572	667	0.001
	P	31	-4.365	ug/L	45.315	2165	-0.002
	K	39	-7.160	ug/L	182.115	324664	-0.089
	Ca	43	-12.831	ug/L	73.051	306	-0.000
>	Sc	45		ug/L		149508	149508.485
	Ti	47	-0.078	ug/L	102.715	144	-0.000
	V	51	-0.203	ug/L	111.519	-5942	-0.002
	Cr	52	1.085	ug/L	12.296	3638	0.011
	Cr	53		ug/L		145662	0.109
	Mn	55	0.045	ug/L	25.609	930	0.001
	Fe	57	2.447	ug/L	37.782	2462	0.001
	Co	59	0.012	ug/L	81.752	117	0.000
	Ni	60	0.034	ug/L	17.961	111	0.000
	Cu	63		ug/L		173	0.000
	Cu	65	-0.021	ug/L	67.318	81	-0.000
	Zn	66	0.028	ug/L	72.725	58	0.000
	Zn	67		ug/L		7097	-0.003
	Zn	68		ug/L		569	-0.001
>	Ge	74		ug/L		103357	103356.653
	As	75	1.299	ug/L	32.656	458	0.003
	Se	77		ug/L		7776	0.025
	Se	82	0.221	ug/L	107.969	-6	0.000
	Kr	83		ug/L		40	-0.000
	Sr	88	0.015	ug/L	21.558	182	0.001
	Y	89		ug/L		14	0.000
	Zr	90	0.146	ug/L	30.954	578	0.005
	Mo	98	0.040	ug/L	39.785	76	0.001
	Ag	107	0.022	ug/L	58.974	75	0.000
	Cd	111	0.005	ug/L	102.729	12	0.000
	Cd	114		ug/L		27	0.000
>	In	115		ug/L		65157	65157.334
	Sn	120	0.112	ug/L	24.133	323	0.003
	Sb	121	0.523	ug/L	25.884	829	0.010
	Sb	123		ug/L		670	0.008
	Ba	135		ug/L		21	0.000
	Ba	137	-0.004	ug/L	41.229	25	-0.000
	Ho	165		ug/L		4	-0.000
>	Lu	175		ug/L		63323	63323.026
	Tl	205	0.755	ug/L	19.253	461	0.006
	Pb	208	-0.004	ug/L	120.040	338	-0.000
	Bi	209		ug/L		9	-0.000
	Th	232	0.176	ug/L	28.277	1270	0.015
	U	238	0.020	ug/L	8.937	285	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	0.9999
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		87.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		87.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		86.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, January 14, 2010 11:51:22
Sample Description:
Method File: C:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.356
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1250.1	1250.055	27.661	2.2
	Mg	24.0	18900.3	18900.295	145.654	0.8
	Co	58.9	47612.8	47612.816	381.058	0.8
	Rh	102.9	90147.1	90147.139	463.368	0.5
	In	114.9	120298.0	120298.011	1009.425	0.8
	Pb	208.0	42306.4	42306.353	263.865	0.6
⌈>	Ba	137.9	97823.1	97823.144	541.480	0.6
⌊	Ba++	69.0	1811.1	0.019	0.001	3.4
⌈>	Ce	139.9	116201.1	116201.083	352.735	0.3
⌊	CeO	155.9	2803.1	0.024	0.000	1.1
	Bkgd	220.0	6.4	6.400	2.702	42.2

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
9.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	8.5	1144.7
Co	59	13	8.8	36254.6
In	115	13	9.5	87651.1

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	603	2060	0.684
Be	9.0	9.0	2052	2045	0.748
Mg	24.0	24.0	5687	2075	0.706
Mg	25.0	25.0	5949	2080	0.755
Mg	26.0	25.9	6154	2085	0.706
Co	58.9	58.9	14166	2140	0.711
Rh	102.9	102.9	24865	2230	0.693
In	114.9	114.9	27774	2255	0.708
Ce	139.9	139.9	33851	2310	0.665
Pb	206.0	205.9	49933	2500	0.700
Pb	207.0	207.0	50101	2380	0.613
Pb	208.0	208.0	50448	2570	0.632
U	238.1	238.0	57691	2510	0.647

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, January 14, 2010 21:54:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\Blank.139

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9		ug/L		5	
>	Sc	45		ug/L		242632	
	Ni	60		ug/L		35	
>	Ge	74		ug/L		121181	
	As	75		ug/L		218	
	Se	77		ug/L		3775	
	Se	82		ug/L		-6	
	Kr	83		ug/L		41	
>	Lu	175		ug/L		70811	
	Tl	205		ug/L		136	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, January 14, 2010 21:59:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\Standard 1.140

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	10.000	ug/L	3.695	604	0.002
>	Sc	45		ug/L		240701	240700.628
	Ni	60	10.000	ug/L	2.277	4538	0.019
>	Ge	74		ug/L		118932	118931.548
	As	75	10.000	ug/L	11.573	3096	0.024
	Se	77		ug/L		5018	0.011
	Se	82	10.000	ug/L	6.737	286	0.002
	Kr	83		ug/L		41	0.000
>	Lu	175		ug/L		68854	68853.567
	Tl	205	10.000	ug/L	0.747	12080	0.174

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, January 14, 2010 22:03:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\Standard 2.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**99.966**	**ug/L**	1.784	5893	0.024
>	Sc	45		**ug/L**		244506	244506.433
	Ni	60	**99.973**	**ug/L**	1.321	44563	0.182
>	Ge	74		**ug/L**		121014	121014.293
	As	75	**100.028**	**ug/L**	0.880	30390	0.249
	Se	77		**ug/L**		7496	0.031
	Se	82	**100.029**	**ug/L**	1.126	3053	0.025
	Kr	83		**ug/L**		43	0.000
>	Lu	175		**ug/L**		69886	69885.895
	Tl	205	**99.978**	**ug/L**	0.626	118809	1.698

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, January 14, 2010 22:07:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 1.142

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**51.024**	**ug/L**	1.536	3062	0.012
>	Sc	45		**ug/L**		248724	248724.125
	Ni	60	**52.069**	**ug/L**	1.595	23625	0.095
>	Ge	74		**ug/L**		123205	123205.242
	As	75	**47.813**	**ug/L**	4.546	14907	0.119
	Se	77		**ug/L**		6615	0.023
	Se	82	**49.022**	**ug/L**	2.790	1520	0.012
	Kr	83		**ug/L**		45	0.000
>	Lu	175		**ug/L**		70724	70724.375
	Tl	205	**48.597**	**ug/L**	1.145	58507	0.825

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	102.049				
>	Sc	45		102.5			
	Ni	60	104.138				
>	Ge	74		101.7			
	As	75	95.627				
	Se	77					
	Se	82	98.044				
	Kr	83					
>	Lu	175		99.9			
	Tl	205	97.193				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, January 14, 2010 22:11:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 2.143

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.004**	**ug/L**	1087.637	5	-0.000
>	Sc	45		**ug/L**		254204	254204.080
	Ni	60	**0.012**	**ug/L**	242.431	43	0.000
>	Ge	74		**ug/L**		127379	127378.659
	As	75	**0.009**	**ug/L**	11871.007	231	0.000
	Se	77		**ug/L**		4253	0.002
	Se	82	**0.103**	**ug/L**	126.785	-3	0.000
	Kr	83		**ug/L**		43	0.000
>	Lu	175		**ug/L**		71935	71934.727
	Tl	205	**0.064**	**ug/L**	9.232	217	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		104.8			
	Ni	60					
>	Ge	74		105.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		101.6			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, January 14, 2010 22:15:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 3.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.516**	ug/L	26.225	36	0.000
>	Sc	45		ug/L		248404	248404.383
	Ni	60	**2.178**	ug/L	5.470	1022	0.004
>	Ge	74		ug/L		124251	124250.964
	As	75	**5.160**	ug/L	33.122	1825	0.013
	Se	77		ug/L		5542	0.013
	Se	82	**5.079**	ug/L	3.469	153	0.001
	Kr	83		ug/L		45	0.000
>	Lu	175		ug/L		69404	69404.220
	Tl	205	**1.037**	ug/L	3.805	1356	0.018

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	103.123				
>	Sc	45		102.4			
	Ni	60	108.915				
>	Ge	74		102.5			
	As	75	103.191				
	Se	77					
	Se	82	101.579				
	Kr	83					
>	Lu	175		98.0			
	Tl	205	103.718				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, January 14, 2010 22:19:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 4.145

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.017**	ug/L	116.638	6	0.000
>	Sc	45		ug/L		242939	242939.010
	Ni	60	**3.303**	ug/L	3.595	1497	0.006
>	Ge	74		ug/L		118785	118785.033
	As	75	**-1.507**	ug/L	74.902	-234	-0.004
	Se	77		ug/L		5859	0.018
	Se	82	**-1.106**	ug/L	27.117	-39	-0.000
	Kr	83		ug/L		90	0.000
>	Lu	175		ug/L		68617	68617.081
	Tl	205	**-0.034**	ug/L	35.911	93	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		100.1			
	Ni	60	122.338				
>	Ge	74		98.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		96.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, January 14, 2010 22:23:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 5.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**18.845**	**ug/L**	1.523	1097	0.005
>	Sc	45		**ug/L**		240640	240639.654
	Ni	60	**22.347**	**ug/L**	0.841	9831	0.041
>	Ge	74		**ug/L**		118984	118983.657
	As	75	**20.724**	**ug/L**	6.562	6360	0.052
	Se	77		**ug/L**		6081	0.020
	Se	82	**21.277**	**ug/L**	2.972	634	0.005
	Kr	83		**ug/L**		75	0.000
>	Lu	175		**ug/L**		68986	68985.521
	Tl	205	**17.452**	**ug/L**	1.840	20583	0.296

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	94.225				
>	Sc	45		99.2			
	Ni	60	98.444				
>	Ge	74		98.2			
	As	75	103.619				
	Se	77					
	Se	82	106.386				
	Kr	83					
>	Lu	175		97.4			
	Tl	205	87.258				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 14, 2010 22:27:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 6.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**50.334**	**ug/L**	1.303	3028	0.012
>	Sc	45		**ug/L**		249355	249354.657
	Ni	60	**51.632**	**ug/L**	0.934	23487	0.094
>	Ge	74		**ug/L**		124395	124395.197
	As	75	**49.160**	**ug/L**	3.861	15470	0.123
	Se	77		**ug/L**		7370	0.028
	Se	82	**49.381**	**ug/L**	1.407	1546	0.012
	Kr	83		**ug/L**		49	0.000
>	Lu	175		**ug/L**		71384	71383.627
	Tl	205	**47.862**	**ug/L**	0.946	58165	0.813

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	100.668				
>	Sc	45		102.8			
	Ni	60	103.263				
>	Ge	74		102.7			
	As	75	98.319				
	Se	77					
	Se	82	98.763				
	Kr	83					
>	Lu	175		100.8			
	Tl	205	95.724				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 14, 2010 22:31:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 7.148

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.013	ug/L	197.874	6	0.000
>	Sc	45		ug/L		253946	253945.584
	Ni	60	0.000	ug/L	21763.972	37	0.000
>	Ge	74		ug/L		129008	129007.929
	As	75	-0.038	ug/L	3798.624	224	-0.000
	Se	77		ug/L		4873	0.007
	Se	82	-0.094	ug/L	264.981	-9	-0.000
	Kr	83		ug/L		48	0.000
>	Lu	175		ug/L		71668	71668.395
	Tl	205	0.059	ug/L	23.660	209	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		104.7			
	Ni	60					
>	Ge	74		106.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		101.2			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011703
Sample Date/Time: Thursday, January 14, 2010 22:35:37
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 940082|1|sk|
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\1202011703.149

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.029	ug/L	158.634	3	-0.000
>	Sc	45		ug/L		241709	241709.466
	Ni	60	0.012	ug/L	154.776	40	0.000
>	Ge	74		ug/L		122245	122245.050
	As	75	0.253	ug/L	971.257	292	0.001
	Se	77		ug/L		14916	0.091
	Se	82	-0.316	ug/L	72.981	-16	-0.000
	Kr	83		ug/L		53	0.000
>	Lu	175		ug/L		66075	66075.120
	Tl	205	-0.033	ug/L	16.209	90	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		99.6			
	Ni	60					
>	Ge	74		100.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		93.3			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011704
Sample Date/Time: Thursday, January 14, 2010 22:39:45
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 940082|1|skj
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\1202011704.150

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**51.493**	ug/L	1.949	3098	0.012
>	Sc	45		ug/L		249348	249348.466
	Ni	60	**50.374**	ug/L	0.498	22917	0.092
>	Ge	74		ug/L		124642	124642.308
	As	75	**46.941**	ug/L	4.080	14809	0.117
	Se	77		ug/L		16381	0.100
	Se	82	**51.075**	ug/L	1.970	1602	0.013
	Kr	83		ug/L		46	0.000
>	Lu	175		ug/L		67161	67161.181
	Tl	205	**44.238**	ug/L	0.922	50594	0.751

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		102.8			
	Ni	60					
>	Ge	74		102.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		94.8			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 14, 2010 23:00:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 6.155

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**50.188**	**ug/L**	1.455	3077	0.012
>	Sc	45		**ug/L**		254134	254134.400
	Ni	60	**51.771**	**ug/L**	0.962	24003	0.094
>	Ge	74		**ug/L**		126064	126063.704
	As	75	**48.264**	**ug/L**	2.097	15393	0.120
	Se	77		**ug/L**		8244	0.034
	Se	82	**49.167**	**ug/L**	2.633	1560	0.012
	Kr	83		**ug/L**		51	0.000
>	Lu	175		**ug/L**		71241	71240.573
	Tl	205	**46.896**	**ug/L**	0.603	56884	0.797

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	100.376				
>	Sc	45		104.7			
	Ni	60	103.541				
>	Ge	74		104.0			
	As	75	96.527				
	Se	77					
	Se	82	98.333				
	Kr	83					
>	Lu	175		100.6			
	Tl	205	93.793				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 14, 2010 23:04:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 7.156

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.016	ug/L	259.933	4	-0.000
>	Sc	45		ug/L		258627	258626.506
	Ni	60	0.008	ug/L	259.091	41	0.000
>	Ge	74		ug/L		129123	129122.901
	As	75	-0.774	ug/L	213.654	-15	-0.002
	Se	77		ug/L		5041	0.008
	Se	82	-0.248	ug/L	46.789	-14	-0.000
	Kr	83		ug/L		54	0.000
>	Lu	175		ug/L		72126	72125.679
	Tl	205	0.161	ug/L	12.832	336	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		106.6			
	Ni	60					
>	Ge	74		106.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		101.9			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 14, 2010 23:29:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 6.162

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**50.414**	ug/L	0.921	3075	0.012
>	Sc	45		ug/L		252815	252814.669
	Ni	60	**52.266**	ug/L	1.138	24106	0.095
>	Ge	74		ug/L		124644	124644.314
	As	75	**46.343**	ug/L	3.874	14623	0.116
	Se	77		ug/L		8392	0.036
	Se	82	**48.073**	ug/L	2.443	1508	0.012
	Kr	83		ug/L		52	0.000
>	Lu	175		ug/L		69748	69747.552
	Tl	205	**46.209**	ug/L	1.017	54875	0.785

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	100.828				
>	Sc	45		104.2			
	Ni	60	104.531				
>	Ge	74		102.9			
	As	75	92.686				
	Se	77					
	Se	82	96.146				
	Kr	83					
>	Lu	175		98.5			
	Tl	205	92.418				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 14, 2010 23:33:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 7.163

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.015**	**ug/L**	102.561	4	-0.000
>	Sc	45		**ug/L**		257169	257168.722
	Ni	60	**-0.003**	**ug/L**	382.236	36	-0.000
>	Ge	74		**ug/L**		128419	128418.949
	As	75	**-0.362**	**ug/L**	238.696	116	-0.001
	Se	77		**ug/L**		5152	0.009
	Se	82	**-0.269**	**ug/L**	18.746	-15	-0.000
	Kr	83		**ug/L**		51	0.000
>	Lu	175		**ug/L**		72343	72343.464
	Tl	205	**0.223**	**ug/L**	11.218	414	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		106.0			
	Ni	60					
>	Ge	74		106.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		102.2			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244226001
Sample Date/Time: Thursday, January 14, 2010 23:45:34
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940082|1|skj
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\244226001.166

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.016	ug/L	223.691	4	-0.000
>	Sc	45		ug/L		239811	239811.426
	Ni	60	0.112	ug/L	37.028	84	0.000
>	Ge	74		ug/L		121891	121891.078
	As	75	-0.184	ug/L	229.760	163	-0.000
	Se	77		ug/L		17703	0.114
	Se	82	-0.012	ug/L	1975.947	-6	-0.000
	Kr	83		ug/L		45	0.000
>	Lu	175		ug/L		64244	64243.789
	Tl	205	-0.013	ug/L	80.080	110	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		98.8			
	Ni	60					
>	Ge	74		100.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		90.7			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244226002
Sample Date/Time: Thursday, January 14, 2010 23:49:43
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940082|1|skj
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\244226002.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.010	ug/L	175.074	4	-0.000
>	Sc	45		ug/L		237334	237333.571
	Ni	60	0.207	ug/L	8.652	124	0.000
>	Ge	74		ug/L		120525	120525.164
	As	75	-2.978	ug/L	35.642	-679	-0.007
	Se	77		ug/L		18021	0.118
	Se	82	-0.036	ug/L	612.305	-7	-0.000
	Kr	83		ug/L		48	0.000
>	Lu	175		ug/L		64124	64124.240
	Tl	205	-0.040	ug/L	26.810	80	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		97.8			
	Ni	60					
>	Ge	74		99.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		90.6			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 14, 2010 23:57:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 6.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**53.664**	ug/L	0.494	3068	0.013
>	Sc	45		ug/L		236968	236967.986
	Ni	60	**50.776**	ug/L	2.240	21952	0.092
>	Ge	74		ug/L		116396	116396.451
	As	75	**47.062**	ug/L	1.094	13863	0.117
	Se	77		ug/L		8252	0.040
	Se	82	**48.056**	ug/L	0.947	1408	0.012
	Kr	83		ug/L		49	0.000
>	Lu	175		ug/L		66851	66851.410
	Tl	205	**47.315**	ug/L	1.461	53858	0.804

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	107.328				
>	Sc	45		97.7			
	Ni	60	101.551				
>	Ge	74		96.1			
	As	75	94.125				
	Se	77					
	Se	82	96.111				
	Kr	83					
>	Lu	175		94.4			
	Tl	205	94.630				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, January 15, 2010 00:02:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 7.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.051	ug/L	52.055	2	-0.000
>	Sc	45		ug/L		240156	240155.890
	Ni	60	0.008	ug/L	138.180	39	0.000
>	Ge	74		ug/L		119567	119567.485
	As	75	0.061	ug/L	1182.282	233	0.000
	Se	77		ug/L		5371	0.014
	Se	82	-0.148	ug/L	175.457	-10	-0.000
	Kr	83		ug/L		48	0.000
>	Lu	175		ug/L		69741	69740.517
	Tl	205	0.202	ug/L	4.221	374	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		99.0			
	Ni	60					
>	Ge	74		98.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		98.5			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, January 15, 2010 00:22:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 6.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**53.657**	**ug/L**	2.292	2982	0.013
>	Sc	45		**ug/L**		230325	230325.333
	Ni	60	**51.188**	**ug/L**	1.124	21510	0.093
>	Ge	74		**ug/L**		112737	112736.545
	As	75	**48.333**	**ug/L**	1.076	13785	0.120
	Se	77		**ug/L**		8144	0.041
	Se	82	**48.963**	**ug/L**	2.647	1389	0.012
	Kr	83		**ug/L**		49	0.000
>	Lu	175		**ug/L**		67021	67020.539
	Tl	205	**47.726**	**ug/L**	1.387	54451	0.811

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	107.314				
>	Sc	45		94.9			
	Ni	60	102.377				
>	Ge	74		93.0			
	As	75	96.666				
	Se	77					
	Se	82	97.927				
	Kr	83					
>	Lu	175		94.6			
	Tl	205	95.452				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, January 15, 2010 00:26:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 7.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.009	ug/L	593.721	5	0.000
>	Sc	45		ug/L		233348	233348.047
	Ni	60	0.006	ug/L	105.914	36	0.000
>	Ge	74		ug/L		117105	117104.914
	As	75	-0.385	ug/L	61.629	98	-0.001
	Se	77		ug/L		5240	0.014
	Se	82	-0.162	ug/L	242.452	-11	-0.000
	Kr	83		ug/L		41	0.000
>	Lu	175		ug/L		67954	67953.590
	Tl	205	0.150	ug/L	10.522	304	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		96.2			
	Ni	60					
>	Ge	74		96.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		96.0			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011705
Sample Date/Time: Friday, January 15, 2010 00:35:04
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 940082|1|skj
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\1202011705.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.127**	**ug/L**	39.290	11	0.000
>	Sc	45		**ug/L**		220722	220721.932
	Ni	60	**0.552**	**ug/L**	3.495	254	0.001
>	Ge	74		**ug/L**		106933	106933.122
	As	75	**0.682**	**ug/L**	190.954	374	0.002
	Se	77		**ug/L**		15967	0.118
	Se	82	**-0.101**	**ug/L**	300.532	-8	-0.000
	Kr	83		**ug/L**		44	0.000
>	Lu	175		**ug/L**		61393	61392.581
	Tl	205	**0.018**	**ug/L**	87.450	137	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		91.0			
	Ni	60					
>	Ge	74		88.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		86.7			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011706
Sample Date/Time: Friday, January 15, 2010 00:39:14
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 940082|1|sk|
Method File: c:\elandata\Method\be,nl,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\1202011706.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**55.958**	**ug/L**	2.083	2965	0.013
>	Sc	45		**ug/L**		219646	219645.972
	Ni	60	**48.991**	**ug/L**	0.888	19632	0.089
>	Ge	74		**ug/L**		105343	105342.688
	As	75	**80.107**	**ug/L**	1.624	21224	0.200
	Se	77		**ug/L**		14951	0.111
	Se	82	**19.538**	**ug/L**	4.880	515	0.005
	Kr	83		**ug/L**		56	0.000
>	Lu	175		**ug/L**		61616	61615.540
	Tl	205	**83.171**	**ug/L**	1.859	87160	1.413

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		90.5			
	Ni	60					
>	Ge	74		86.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		87.0			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011707
Sample Date/Time: Friday, January 15, 2010 00:43:23
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 940082|1|sk| 5 EAG 1/25/10
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\1202011707.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.041	ug/L	98.580	6	0.000
>	Sc	45		ug/L		217747	217746.517
	Ni	60	0.113	ug/L	1.934	77	0.000
>	Ge	74		ug/L		108702	108702.100
	As	75	-0.583	ug/L	168.389	36	-0.001
	Se	77		ug/L		6922	0.033
	Se	82	-0.020	ug/L	680.092	-6	-0.000
	Kr	83		ug/L		34	-0.000
>	Lu	175		ug/L		67579	67578.815
	Tl	205	1.126	ug/L	2.402	1423	0.019

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		89.7			
	Ni	60					
>	Ge	74		89.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		95.4			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, January 15, 2010 00:51:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 6.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**53.199**	**ug/L**	2.819	2814	0.013
>	Sc	45		**ug/L**		219273	219273.368
	Ni	60	**51.377**	**ug/L**	1.485	20551	0.094
>	Ge	74		**ug/L**		108100	108100.202
	As	75	**47.697**	**ug/L**	1.625	13046	0.119
	Se	77		**ug/L**		6719	0.031
	Se	82	**49.717**	**ug/L**	2.448	1353	0.013
	Kr	83		**ug/L**		42	0.000
>	Lu	175		**ug/L**		67112	67111.628
	Tl	205	**48.137**	**ug/L**	1.067	54996	0.818

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9	106.398				
>	Sc	45			90.4		
	Ni	60	102.753				
>	Ge	74			89.2		
	As	75	95.393				
	Se	77					
	Se	82	99.434				
	Kr	83					
>	Lu	175			94.8		
	Tl	205	96.273				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, January 15, 2010 00:55:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be,ni,as,se,tl.mth
Dataset File: c:\elandata\dataset\100114\QC Std 7.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.011**	ug/L	385.995	4	-0.000
>	Sc	45		ug/L		220756	220755.603
	Ni	60	**0.012**	ug/L	180.158	37	0.000
>	Ge	74		ug/L		110434	110433.979
	As	75	**-0.175**	ug/L	394.468	150	-0.000
	Se	77		ug/L		4374	0.008
	Se	82	**-0.032**	ug/L	791.144	-6	-0.000
	Kr	83		ug/L		43	0.000
>	Lu	175		ug/L		67009	67009.478
	Tl	205	**0.291**	ug/L	2.832	461	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Be	9					
>	Sc	45		91.0			
	Ni	60					
>	Ge	74		91.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		94.6			
	Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, January 21, 2010 09:41:58
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1718
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35
Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1601.7	1601.690	53.319	3.3
	Mg	24.0	24720.2	24720.171	248.944	1.0
	Co	58.9	67841.5	67841.517	645.780	1.0
	Rh	102.9	121539.2	121539.231	542.480	0.4
	In	114.9	179498.9	179498.858	386.714	0.2
	Pb	208.0	196661.1	196661.051	1475.462	0.8
⌈>	Ba	137.9	170816.9	170816.910	695.460	0.4
⌊	Ba++	69.0	2258.3	0.013	0.000	1.5
⌈>	Ce	139.9	209506.3	209506.283	745.756	0.4
⌊	CeO	155.9	4420.2	0.021	0.000	1.1
	Bkgd	220.0	14.0	14.000	2.622	18.7

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1718.75	Analog Stage Voltage
1200.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	8.5	3991.2
Co	59	21	9.8	64642.3
In	115	21	11.5	167168.1

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	583	2050	0.637
Be	9.0	9.0	2043	2070	0.611
Mg	24.0	24.0	5697	2070	0.617
Mg	25.0	25.0	5937	2070	0.609
Mg	26.0	26.0	6184	2070	0.624
Co	58.9	58.9	14190	2105	0.603
Rh	102.9	102.9	24873	2165	0.598
In	114.9	114.9	27799	2185	0.596
Ce	139.9	139.9	33871	2200	0.614
Pb	206.0	206.0	49948	2270	0.653
Pb	207.0	207.0	50159	2235	0.651
Pb	208.0	208.0	50451	2260	0.695
U	238.1	238.0	57724	2275	0.694

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, January 21, 2010 16:05:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\Blank.070

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9		ug/L		13	
⌊>	Sc	45		ug/L		1329035	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, January 21, 2010 16:06:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\Standard 1.071

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	0.899	3515	0.003
Sc	45		ug/L		1259526	1259526.444

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, January 21, 2010 16:08:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\Standard 2.072

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	99.986	ug/L	0.657	34425	0.027
⌊>	Sc	45		ug/L		1255255	1255254.771

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, January 21, 2010 16:10:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 1.073

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	51.482	ug/L	2.477	17811	0.014
⌊>	Sc	45		ug/L		1261163	1261163.489

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	102.963				
⌊>	Sc	45		94.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, January 21, 2010 16:11:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 2.074

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.016**	**ug/L**	81.887	19	0.000
⌊>	Sc	45		**ug/L**		1349921	1349920.828

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, January 21, 2010 16:13:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 3.075

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.513	ug/L	3.843	190	0.000
Sc	45		ug/L		1259817	1259816.615

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	102.508				
Sc	45		94.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, January 21, 2010 16:14:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 4.076

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.051	ug/L	35.738	28	0.000
Sc	45		ug/L		1180354	1180353.753

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		88.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, January 21, 2010 16:16:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 5.077

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.575	ug/L	1.518	6486	0.005
Sc	45		ug/L		1206162	1206162.221

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	97.873				
Sc	45		90.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 21, 2010 16:18:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 6.078

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**51.209**	**ug/L**	1.513	17826	0.014
⌊>	Sc	45		**ug/L**		1268741	1268740.637

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9	102.419				
⌊>	Sc	45		95.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 21, 2010 16:19:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 7.079

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.012	ug/L	133.470	18	0.000
⌊>	Sc	45		ug/L		1333049	1333048.865

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		100.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011703
Sample Date/Time: Thursday, January 21, 2010 16:21:40
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 940082|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\1202011703.080

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.001	ug/L	189.083	13	0.000
⌊>	Sc	45		ug/L		1247422	1247422.189

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		93.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011704
Sample Date/Time: Thursday, January 21, 2010 16:23:20
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 940082|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\1202011704.081

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	55.135	ug/L	2.495	19282	0.015
Sc	45		ug/L		1274913	1274913.357

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		95.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 21, 2010 16:35:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 6.088

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**51.384**	**ug/L**	1.662	17894	0.014
⌊>	Sc	45		**ug/L**		1269459	1269458.745

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Be	9	102.768				
⌊>	Sc	45		95.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 21, 2010 16:36:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 7.089

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.017	ug/L	68.991	20	0.000
Sc	45		ug/L		1365106	1365105.805

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		102.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244226001
Sample Date/Time: Thursday, January 21, 2010 16:50:21
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940082|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\244226001.095

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.011	ug/L	137.285	16	0.000
Sc	45		ug/L		1235954	1235953.837

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		93.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244226002
Sample Date/Time: Thursday, January 21, 2010 16:52:04
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940082|1|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\244226002.096

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.006	ug/L	180.051	14	0.000
Sc	45		ug/L		1232148	1232147.622

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		92.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 21, 2010 16:53:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 6.097

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.311	ug/L	0.804	17928	0.014
Sc	45		ug/L		1273422	1273422.437

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9	102.622				
Sc	45		95.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 21, 2010 16:55:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 7.098

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.018	ug/L	52.479	20	0.000
⌊>	Sc	45		ug/L		1345791	1345791.027

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		101.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011705
Sample Date/Time: Thursday, January 21, 2010 17:04:47
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 940082|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\1202011705.100

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.110	ug/L	17.881	50	0.000
Sc	45		ug/L		1251736	1251735.943

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		94.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011706
Sample Date/Time: Thursday, January 21, 2010 17:06:32
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 940082|1|ba|
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\1202011706.101

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	55.184	ug/L	1.617	19062	0.015
⌊>	Sc	45		ug/L		1259050	1259050.144

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		94.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011707
Sample Date/Time: Thursday, January 21, 2010 17:08:17
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 940082|5|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\1202011707.102

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.027	ug/L	97.666	21	0.000
Sc	45		ug/L		1212258	1212258.477

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		91.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, January 21, 2010 17:10:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 6.103

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	53.971	ug/L	1.571	17533	0.015
>	Sc	45		ug/L		1184102	1184102.141

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9	107.942				
>	Sc	45		89.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, January 21, 2010 17:11:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: C:\elandata\Dataset\100121\QC Std 7.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.013	ug/L	38.420	17	0.000
⌊>	Sc	45		ug/L		1240107	1240106.621

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		93.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Analysis Begun

Logged In Analyst: Administrator
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\011410W1.SIF
Batch ID:
Results Data Set: 011410W1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank
Date Collected: 1/14/2010 09:33:43
Analyst:
Data Type: Original

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0003	0.0004	0.0003	09:34:44	Yes
2		[0.00]	0.0002	-0.0003	0.0002	09:35:18	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	10.68				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 2
Sample ID: S0.2
Date Collected: 1/14/2010 09:35:37
Analyst:
Data Type: Original

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0018	0.0084	0.0020	09:36:38	Yes
2		[0.2]	0.0018	0.0082	0.0020	09:37:12	Yes
Mean:		[0.2]	0.0018				
SD:		0.0	0.0000				
%RSD:		0.0	0.45				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00894 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 3
Sample ID: S0.5
Date Collected: 1/14/2010 09:37:32
Analyst:
Data Type: Original

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0047	0.0212	0.0050	09:38:33	Yes
2		[0.5]	0.0047	0.0215	0.0050	09:39:07	Yes
Mean:		[0.5]	0.0047				
SD:		0.0	0.0000				
%RSD:		0.0	0.12				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999697 Slope: 0.00948 Intercept: -0.00004

Sequence No.: 4
Autosampler Location: 4
Sample ID: S2.0
Date Collected: 1/14/2010 09:39:27
Analyst:
Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[2.0]	0.0199	0.0890	0.0202	09:40:28	Yes
2	[2.0]	0.0198	0.0880	0.0201	09:41:03	Yes
Mean:	[2.0]	0.0199				
SD:	0.0	0.0001				
%RSD:	0.0	0.50				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999915 Slope: 0.00999 Intercept: -0.00015

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 1/14/2010 09:41:23**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0490	0.2185	0.0493	09:42:25	Yes
2		[5.0]	0.0487	0.2166	0.0490	09:43:00	Yes
Mean:		[5.0]	0.0489				
SD:		0.0	0.0002				
%RSD:		0.0	0.45				

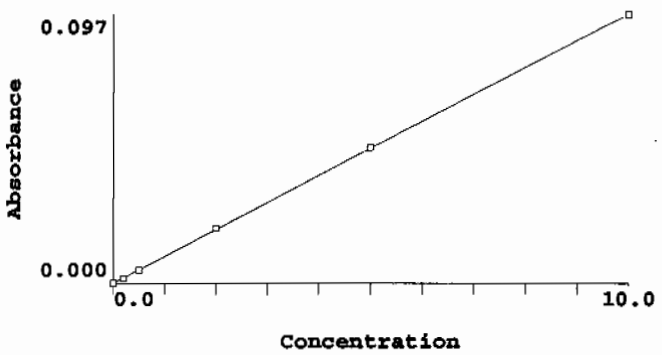
Standard number 4 applied. [5.0]
Correlation Coef.: 0.999958 Slope: 0.00981 Intercept: -0.00005

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 1/14/2010 09:43:20**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.0976	0.4372	0.0978	09:44:20	Yes
2		[10.0]	0.0971	0.4351	0.0973	09:44:55	Yes
Mean:		[10.0]	0.0974				
SD:		0.0	0.0004				
%RSD:		0.0	0.37				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999985 Slope: 0.00975 Intercept: 0.00002



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.002	0.00	10.7
S0.2	0.0018	0.2	0.181	0.00	0.5
S0.5	0.0047	0.5	0.483	0.00	0.1
S2.0	0.0199	2.0	2.037	0.00	0.5
S5.0	0.0489	5.0	5.014	0.00	0.4
S10.0	0.0974	10.0	9.987	0.00	0.4

Correlation Coef.: 0.999985 Slope: 0.00975 Intercept: 0.00002

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 1/14/2010 09:45:14**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.072	5.072	0.0494	0.2217	0.0497	09:46:16	Yes
2	5.038	5.038	0.0491	0.2188	0.0494	09:46:51	Yes
Mean:	5.055	5.055	0.0493				
SD:	0.024	0.024	0.0002				
%RSD:	0.474	0.474	0.47				

QC value within limits for Hg 253.7 Recovery = 101.09%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 1/14/2010 09:47:10**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0001	0.0001	0.0001	09:48:11	Yes
2	-0.014	-0.014	-0.0001	-0.0001	0.0001	09:48:46	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	4.223	4.223	5.02				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 1/14/2010 09:49:06**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.235	0.235	0.0023	0.0106	0.0026	09:50:08	Yes
2	0.240	0.240	0.0024	0.0112	0.0026	09:50:43	Yes
Mean:	0.238	0.238	0.0023				
SD:	0.003	0.003	0.0000				
%RSD:	1.315	1.315	1.30				

QC value within limits for Hg 253.7 Recovery = 118.80%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/14/2010 09:51:03**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.056	5.056	0.0493	0.2207	0.0495	09:52:03	Yes
2	5.071	5.071	0.0494	0.2190	0.0497	09:52:38	Yes
Mean:	5.063	5.063	0.0494				
SD:	0.011	0.011	0.0001				
%RSD:	0.211	0.211	0.21				

QC value within limits for Hg 253.7 Recovery = 101.27%
All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/14/2010 09:52:57**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0001	-0.0001	0.0001	09:53:58	Yes
2	-0.016	-0.016	-0.0001	0.0002	0.0001	09:54:33	Yes
Mean:	-0.016	-0.016	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	4.963	4.963	5.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 Autosampler Location: 12
Sample ID: 1202014282|941137|1 Date Collected: 1/14/2010 09:54:52
Analyst: JXL Data Type: Original

Replicate Data: 1202014282|941137|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.039	0.039	0.0004	0.0030	0.0006	09:55:54	Yes
2	0.039	0.039	0.0004	0.0030	0.0006	09:56:28	Yes
Mean:	0.039	0.039	0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.047	0.047	0.04				

Sequence No.: 13 Autosampler Location: 13
Sample ID: 1202014283|941137|1 Date Collected: 1/14/2010 09:56:49
Analyst: JXL Data Type: Original

Replicate Data: 1202014283|941137|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.099	2.099	0.0205	0.0938	0.0207	09:57:50	Yes
2	2.114	2.114	0.0206	0.0939	0.0209	09:58:26	Yes
Mean:	2.106	2.106	0.0205				
SD:	0.011	0.011	0.0001				
%RSD:	0.506	0.506	0.51				

Sequence No.: 14 Autosampler Location: 14
Sample ID: 244537001|941137|1 Date Collected: 1/14/2010 09:58:46
Analyst: JXL Data Type: Original

Replicate Data: 244537001|941137|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.025	0.025	0.0003	0.0034	0.0005	09:59:47	Yes
2	0.015	0.015	0.0002	0.0023	0.0004	10:00:22	Yes
Mean:	0.020	0.020	0.0002				
SD:	0.007	0.007	0.0001				
%RSD:	35.59	35.59	32.24				

Sequence No.: 15 Autosampler Location: 15
Sample ID: 1202014284|941137|1 Date Collected: 1/14/2010 10:00:41
Analyst: JXL Data Type: Original

Replicate Data: 1202014284|941137|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.034	0.034	0.0003	0.0021	0.0006	10:01:41	Yes
2	0.037	0.037	0.0004	0.0022	0.0006	10:02:16	Yes
Mean:	0.035	0.035	0.0004				
SD:	0.003	0.003	0.0000				

1	0.065	0.065	0.0007	0.0036	0.0009	10:11:14	Yes
2	0.074	0.074	0.0007	0.0046	0.0010	10:11:49	Yes
Mean:	0.069	0.069	0.0007				
SD:	0.007	0.007	0.0001				
%RSD:	9.399	9.399	9.12				

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 1202014320|941153|1 **Date Collected: 1/14/2010 10:12:08**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202014320|941153|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.207	0.207	0.0020	0.0102	0.0023	10:13:09	Yes
2	0.211	0.211	0.0021	0.0108	0.0023	10:13:44	Yes
Mean:	0.209	0.209	0.0021				
SD:	0.003	0.003	0.0000				
%RSD:	1.512	1.512	1.50				

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/14/2010 10:14:04**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.209	5.209	0.0508	0.2254	0.0510	10:15:04	Yes
2	5.235	5.235	0.0510	0.2262	0.0513	10:15:39	Yes
Mean:	5.222	5.222	0.0509				
SD:	0.018	0.018	0.0002				
%RSD:	0.347	0.347	0.35				

QC value within limits for Hg 253.7 Recovery = 104.44%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/14/2010 10:15:58**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	-0.0006	0.0001	10:16:59	Yes
2	-0.008	-0.008	-0.0001	0.0000	0.0002	10:17:33	Yes
Mean:	-0.010	-0.010	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	31.63	31.63	39.93				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 1202014321|941153|1 **Date Collected: 1/14/2010 10:17:53**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202014321|941153|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.151	2.151	0.0210	0.0932	0.0212	10:18:54	Yes
2	2.138	2.138	0.0209	0.0928	0.0211	10:19:29	Yes
Mean:	2.144	2.144	0.0209				
SD:	0.009	0.009	0.0001				
%RSD:	0.430	0.430	0.43				

Sequence No.: 25
Sample ID: 1202014322|941153|5
Analyst: JXL
Autosampler Location: 23
Date Collected: 1/14/2010 10:19:49
Data Type: Original

Replicate Data: 1202014322|941153|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.009	0.009	0.0001	0.0011	0.0003	10:20:50	Yes
2	0.011	0.011	0.0001	0.0010	0.0004	10:21:25	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	15.76	15.76	12.96				

Sequence No.: 26
Sample ID: 1202014309|941150|1
Analyst: JXL
Autosampler Location: 24
Date Collected: 1/14/2010 10:21:45
Data Type: Original

Replicate Data: 1202014309|941150|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	0.0001	0.0014	0.0003	10:22:47	Yes
2	0.007	0.007	0.0001	0.0010	0.0003	10:23:22	Yes
Mean:	0.008	0.008	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	8.425	8.425	6.66				

Sequence No.: 27
Sample ID: 1202014310|941150|1
Analyst: JXL
Autosampler Location: 25
Date Collected: 1/14/2010 10:23:42
Data Type: Original

Replicate Data: 1202014310|941150|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.153	2.153	0.0210	0.0942	0.0212	10:24:44	Yes
2	2.140	2.140	0.0209	0.0927	0.0211	10:25:18	Yes
Mean:	2.146	2.146	0.0209				
SD:	0.009	0.009	0.0001				
%RSD:	0.436	0.436	0.44				

Sequence No.: 28
Sample ID: 244141001|941150|1
Analyst: JXL
Autosampler Location: 26
Date Collected: 1/14/2010 10:25:39
Data Type: Original

Replicate Data: 244141001|941150|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.070	0.070	0.0007	0.0042	0.0009	10:26:39	Yes
2	0.070	0.070	0.0007	0.0041	0.0009	10:27:14	Yes
Mean:	0.070	0.070	0.0007				
SD:	0.000	0.000	0.0000				
%RSD:	0.039	0.039	0.04				

Sequence No.: 29
Sample ID: 244141002|941150|1
Analyst: JXL
Autosampler Location: 27
Date Collected: 1/14/2010 10:27:34
Data Type: Original

Replicate Data: 244141002|941150|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0001	-0.0001	0.0002	10:28:34	Yes
2	-0.005	-0.005	-0.0000	0.0006	0.0002	10:29:10	Yes
Mean:	-0.007	-0.007	-0.0001				

SD:	0.004	0.004	0.0000
%RSD:	51.69	51.69	72.52

==========

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 244145001|941150|1 **Date Collected: 1/14/2010 10:29:29**
Analyst: JXL **Data Type: Original**

Replicate Data: 244145001|941150|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0000	0.0006	0.0002	10:30:30	Yes
2	0.002	0.002	0.0000	0.0010	0.0003	10:31:04	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	344.1	344.1	>999.9%				

==========

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 244226001|941150|1 **Date Collected: 1/14/2010 10:31:23**
Analyst: JXL **Data Type: Original**

Replicate Data: 244226001|941150|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0000	0.0006	0.0003	10:32:24	Yes
2	0.007	0.007	0.0001	0.0014	0.0003	10:32:59	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	59.95	59.95	41.40				

==========

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 1202014311|941150|1 **Date Collected: 1/14/2010 10:33:18**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202014311|941150|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0010	0.0003	10:34:19	Yes
2	-0.006	-0.006	-0.0000	0.0000	0.0002	10:34:54	Yes
Mean:	-0.002	-0.002	-0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	222.7	222.7	>999.9%				

==========

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 1202014312|941150|1 **Date Collected: 1/14/2010 10:35:13**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202014312|941150|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.140	2.140	0.0209	0.0938	0.0211	10:36:14	Yes
2	2.134	2.134	0.0208	0.0938	0.0211	10:36:48	Yes
Mean:	2.137	2.137	0.0208				
SD:	0.004	0.004	0.0000				
%RSD:	0.195	0.195	0.19				

==========

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/14/2010 10:37:08**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.303	5.303	0.0517	0.2315	0.0520	10:38:08	Yes
2	5.305	5.305	0.0517	0.2305	0.0520	10:38:43	Yes
Mean:	5.304	5.304	0.0517				
SD:	0.001	0.001	0.0000				
%RSD:	0.019	0.019	0.02				

QC value within limits for Hg 253.7 Recovery = 106.08%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/14/2010 10:39:02**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0011	0.0003	10:40:03	Yes
2	-0.001	-0.001	0.0000	0.0007	0.0003	10:40:38	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	178.9	178.9	95.51				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: 1202014313|941150|5 **Date Collected: 1/14/2010 10:40:57**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202014313|941150|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	0.0001	0.0002	10:41:58	Yes
2	0.003	0.003	0.0000	0.0013	0.0003	10:42:33	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	622.2	622.2	385.25				

Sequence No.: 37 **Autosampler Location: 33**
Sample ID: 244226002|941150|1 **Date Collected: 1/14/2010 10:42:53**
Analyst: JXL **Data Type: Original**

Replicate Data: 244226002|941150|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0005	0.0002	10:43:54	Yes
2	-0.002	-0.002	0.0000	0.0008	0.0002	10:44:29	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	3.167	3.167	50.78				

Sequence No.: 38 **Autosampler Location: 34**
Sample ID: 1202014327|941158|1 **Date Collected: 1/14/2010 10:44:48**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202014327|941158|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	-0.0007	0.0001	10:45:50	Yes
2	-0.001	-0.001	0.0000	0.0010	0.0003	10:46:25	Yes
Mean:	-0.007	-0.007	-0.0000				
SD:	0.008	0.008	0.0001				
%RSD:	119.2	119.2	174.12				

Mean:	0.044	0.044	0.0004
SD:	0.008	0.008	0.0001
%RSD:	17.68	17.68	16.88

==========

Sequence No.: 44 **Autosampler Location: 40**
Sample ID: 1202014329|941158|1 **Date Collected: 1/14/2010 10:56:26**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202014329|941158|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.043	0.043	0.0004	0.0025	0.0007	10:57:27	Yes
2	0.043	0.043	0.0004	0.0023	0.0007	10:58:02	Yes
Mean:	0.043	0.043	0.0004				
SD:	0.000	0.000	0.0000				
%RSD:	0.029	0.029	0.03				

==========

Sequence No.: 45 **Autosampler Location: 41**
Sample ID: 1202014330|941158|1 **Date Collected: 1/14/2010 10:58:22**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202014330|941158|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.172	2.172	0.0212	0.0961	0.0214	10:59:23	Yes
2	2.181	2.181	0.0213	0.0956	0.0215	10:59:58	Yes
Mean:	2.176	2.176	0.0212				
SD:	0.006	0.006	0.0001				
%RSD:	0.295	0.295	0.30				

==========

Sequence No.: 46 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/14/2010 11:00:17**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.041	5.041	0.0492	0.2212	0.0494	11:01:18	Yes
2	5.066	5.066	0.0494	0.2207	0.0496	11:01:52	Yes
Mean:	5.053	5.053	0.0493				
SD:	0.017	0.017	0.0002				
%RSD:	0.338	0.338	0.34				

QC value within limits for Hg 253.7 Recovery = 101.07%
All analyte(s) passed QC.

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Sequence No.: 47 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/14/2010 11:02:11**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0001	0.0001	0.0002	11:03:12	Yes
2	-0.006	-0.006	-0.0000	-0.0004	0.0002	11:03:47	Yes
Mean:	-0.007	-0.007	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	9.310	9.310	13.32				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 48 **Autosampler Location: 42**
Sample ID: 1202014334|941158|5 **Date Collected: 1/14/2010 11:04:06**

Miscellaneous

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 940079

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202011704	UI1246651-A	.5	mL
LCS	1202011704	UI1246654-B	.5	mL
MS	1202011706	UI090828-A	.5	mL
MS	1202011706	UI090828-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202011703		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
LCS	1202011704		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244129001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244129002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244129003		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244141001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244141002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244145001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244208001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244208002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244213001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244217001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244217002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244226001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244226002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244236001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244236002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244236003		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244236004		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244236005		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244240001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
DUP	1202011705	244240001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
MS	1202011706	244240001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SDILT	1202011707	244240001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244240002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
1252838	2.5 mL	HYDROCHLORIC ACID
1252836	1 mL	Nitric Acid CONC.

Comments

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 940083

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202011709	UI091216-01	.25	mL
LCS	1202011709	UI091216-06	.25	mL
MS	1202011711	UI091216-01	.25	mL
MS	1202011711	UI091216-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202011708		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
LCS	1202011709		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244129001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244129002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244129003		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244141001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244141002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244145001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
DUP	1202011710	244145001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
MS	1202011711	244145001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SDILT	1202011712	244145001	SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244208001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244208002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244213001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244217001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244217002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244226001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244226002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	WATER
SAMPLE	244236001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244236002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244236003		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244236004		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244236005		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244240001		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER
SAMPLE	244240002		SW846 3005A	11-JAN-2010 13:00	<2	50 mL	50 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
1252838	2.5 mL	HYDROCHLORIC ACID
1252836	1 mL	Nitric Acid CONC.

Comments:

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 941148

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202014310	WHG100113-13	.2	mL
MS	1202014312	WHG100113-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202014309		SW846 7470A Prep	13-JAN-2010 12:10	<2	20 mL	20 mL	1	WATER
LCS	1202014310		SW846 7470A Prep	13-JAN-2010 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	244141001		SW846 7470A Prep	13-JAN-2010 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	244141002		SW846 7470A Prep	13-JAN-2010 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	244145001		SW846 7470A Prep	13-JAN-2010 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	244226001		SW846 7470A Prep	13-JAN-2010 12:10	<2	20 mL	20 mL	1	WATER
DUP	1202014311	244226001	SW846 7470A Prep	13-JAN-2010 12:10	<2	20 mL	20 mL	1	WATER
MS	1202014312	244226001	SW846 7470A Prep	13-JAN-2010 12:10	<2	20 mL	20 mL	1	WATER
SDILT	1202014313	244226001	SW846 7470A Prep	13-JAN-2010 12:10	<2	20 mL	20 mL	1	WATER
SAMPLE	244226002		SW846 7470A Prep	13-JAN-2010 12:10	<2	20 mL	20 mL	1	WATER

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1240182-1	.5 mL	NITRIC ACID
1234385-C	1.5 mL	5% Potassium Persulfate
1244904-C	3 mL	5% KMnO4 solution
1206350-C	1 mL	Hg reducing agent
WHG100113-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG100113-01a	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100113-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG100113-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG100113-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG100113-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments Digestion Start Date: 13-JAN-10 12:10
Digestion End Date: 13-JAN-10 14:10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: O2SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090828-A **Opened:** 28-AUG-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 27-AUG-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 28-AUG-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L

Analyte	Concentration	Analyte	Concentration
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI090828-B **Opened:** 28-AUG-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 27-AUG-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 28-AUG-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE

Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Standard Logbook

Serial ID:	UI091102-41	**Opened:**	16-NOV-09	**Amount :**	500 mL
Name:	TRACE CALSTD#1B SOUF	**Received:**	02-NOV-09	**Catalog Number :**	HP2270-2-500
Type:	Source Material	**Expires:**	31-OCT-10	**Lot Number :**	0930216
Employee:	Helen Camello			**Solvent :**	HNO3
Supplier:	Environmental Express				
Description:	Trace Calibration Standard #1B				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID:	UI091102-42	**Opened:**	17-NOV-09	**Amount :**	200 mL
Name:	SILICON	**Received:**	02-NOV-09	**Catalog Number :**	HP100050-4F
Type:	Source Material	**Expires:**	17-NOV-10	**Lot Number :**	0921924
Employee:	Helen Camello			**Solvent :**	H20/tr HF
Supplier:	ENVIRNMENTAL EXPRESS				
Description:	SILICON 1000mg/L H20/tr HF				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID:	UI091212-11	**Opened:**	12-DEC-09	**Amount :**	1000 mL
Name:	ICP-MS ICSA Master A	**Received:**	12-DEC-09	**Catalog Number :**	160013-01-01L
Type:	Source Material	**Expires:**	12-DEC-10	**Lot Number :**	1015303
Employee:	Paul Boyd			**Solvent :**	2% HNO3
Supplier:	02SI				
Description:	ICP-MS ICSA Master A				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID:	UI091212-60	**Opened:**	12-DEC-09	**Amount :**	.5 mL
Name:	ICPMS High Range Standa	**Received:**	12-DEC-09	**Catalog Number :**	160212-02-01
Type:	Source Material	**Expires:**	12-DEC-10	**Lot Number :**	1018064
Employee:	Paul Boyd			**Solvent :**	2%HNO3 + Tr HF
Supplier:	O2SI				
Description:	Linear Range Standard A				

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091212-61 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091215-48 **Opened:** 04-JAN-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 18-DEC-09 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 04-JAN-11 **Lot Number :** 1018219
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Standard Logbook

Serial ID: UI091216-01 **Opened:** 16-DEC-09 **Lot Number :** 1018095
Name: METALSPIKE-1 **Received:** 16-DEC-09
Type: Source Material **Expires:** 16-DEC-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091216-06 **Opened:** 16-DEC-09 **Lot Number :** 1018096
Name: METALSPIKE-2 **Received:** 16-DEC-09
Type: Source Material **Expires:** 16-DEC-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L

Analyte	Concentration	Analyte	Concentration
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B

Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100114-40 **Opened:** 14-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 14-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-JAN-11 **Lot Number :** 1018160
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100114-41 **Opened:** 14-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 14-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-JAN-11 **Lot Number :** 1018160
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI1246651-A **Opened:** 23-DEC-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 23-DEC-09 **Lot Number :** 1018097
Type: Source Material **Expires:** 23-DEC-10
Employee: Bryan Davis
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI1246654-B **Opened:** 23-DEC-09 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 23-DEC-09 **Lot Number :** 1017644
Type: Source Material **Expires:** 23-DEC-10
Employee: Bryan Davis
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Standard Logbook

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG100113-01 **Opened:** 13-JAN-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 13-JAN-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 14-JAN-10 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100113-02 **Opened:** 13-JAN-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 13-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Intermediate **Expires:** 14-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG100113-01a **Opened:** 13-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 13-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 20-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100113-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Standard Logbook

Serial ID: WHG100113-02 **Opened:** 13-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 13-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 20-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100113-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100113-03 **Opened:** 13-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 13-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 20-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100113-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100113-04 **Opened:** 13-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 13-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 20-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100113-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100113-05 **Opened:** 13-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 13-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 20-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100113-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Standard Logbook

Serial ID: WHG100113-06 **Opened:** 13-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 13-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 20-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100113-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100113-13 **Opened:** 13-JAN-10 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 13-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 20-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100118-42 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1256122
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100118-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100118-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100118-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100118-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100118-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100118-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100118-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100118-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100118-43 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1256122
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100118-44 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1256122
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100118-45 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1256122
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI100118-46 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1256122
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100118-47 **Opened:** 18-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 19-JAN-10 **Solvent :** 3%HCL &1%HNO3-1256122
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100112-04B **Opened:** 12-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 12-JAN-10 **Balance Id :** 40245216
Type: Working **Expires:** 13-JAN-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100113-04 **Opened:** 13-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 13-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 14-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1253206
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100113-04A **Opened:** 13-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 13-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100112-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100112-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100112-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100112-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100112-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100112-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100113-05 **Opened:** 13-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 13-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100113-06 **Opened:** 13-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 13-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 14-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100113-07 **Opened:** 13-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 13-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 14-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1253206
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100113-08 **Opened:** 13-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 13-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 14-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: WMS100113-70 **Opened:** 13-JAN-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 13-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 14-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L

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Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100114-04 **Opened:** 14-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 14-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 15-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1253206
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100114-04A **Opened:** 14-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 14-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 15-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100114-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100114-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100114-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100114-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100114-05 **Opened:** 14-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 14-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 15-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100114-06 **Opened:** 14-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 14-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 15-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100114-07 **Opened:** 14-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 14-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 15-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1253206
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS100114-08 **Opened:** 14-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 14-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 15-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Serial ID:	WMS100121-04	**Opened:**	21-JAN-10	**Amount :**	50 mL
Name:	ICPMS Cal Standard 100	**Received:**	21-JAN-10	**Balance Id :**	4025216
Type:	Working	**Expires:**	22-JAN-10	**Pipet Id :**	3541598
Employee:	Paul Boyd			**Solvent :**	2%HNO3/1%HCl-1256053
Supplier:	GEL				

Description: ICPMS Calibration Standard (100 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS100121-04A **Opened:** 21-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 21-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 22-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100121-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100121-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100121-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100121-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100121-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID:	WMS100121-05	**Opened:**	21-JAN-10	**Balance Id :**	40245216
Name:	ICPMS ICV	**Received:**	21-JAN-10	**Pipet Id :**	3541598
Type:	Working	**Expires:**	22-JAN-10	**Solvent :**	2%HNO3/1%HCl - 1256053
Employee:	Paul Boyd				
Supplier:	GEL				
Description:	ICPMS ICV				
Comments:	None				

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS100121-06 **Opened:** 21-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 21-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 22-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS100121-07 **Opened:** 21-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 21-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 22-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1256053
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100121-08 **Opened:** 21-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 21-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 22-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1164796-A **Opened:** 06-AUG-09 **Lot Number :** 49149927
Name: B-NH2OH.HCl-MER **Received:** 06-AUG-09
Type: Reagent/Solvent **Expires:** 06-AUG-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Standard Logbook

Serial ID: 1206350-C **Opened:** 22-OCT-09 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 22-OCT-09
Type: Reagent/Solvent **Expires:** 15-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1164796-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1234385-C **Opened:** 25-NOV-09 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 25-NOV-09
Type: Reagent/Solvent **Expires:** 25-MAY-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1240182-1 **Opened:** 09-DEC-09 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 09-DEC-09 **Lot Number :** H34040
Type: Reagent/Solvent **Expires:** 09-DEC-10
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID

Comments: None

Serial ID: 1244904-C **Opened:** 18-DEC-09 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 18-DEC-09
Type: Reagent/Solvent **Expires:** 18-JUN-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1244970 **Opened:** 18-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 18-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 18-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1252836 **Opened:** 08-JAN-10 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 08-JAN-10
Type: Reagent/Solvent **Expires:** 08-JAN-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1252838 **Opened:** 08-JAN-10 **Lot Number :** H41032
Name: I-HCL **Received:** 08-JAN-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 08-JAN-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1253206 **Opened:** 11-JAN-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 11-JAN-10
Type: Reagent/Solvent **Expires:** 18-JAN-10
Employee: Paul Boyd
Supplier: GEL

Standard Logbook

Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1238345	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1244970	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1256053 **Opened:** 18-JAN-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 18-JAN-10
Type: Reagent/Solvent **Expires:** 25-JAN-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1238345	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1244970	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1256122 **Opened:** 18-JAN-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 18-DEC-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 24-JAN-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1161-1

Sample Analysis

Sample ID	Client ID
244227001	RE12-10-7734
244227002	RE12-10-7701
244227003	RE12-10-7702
244227004	RE12-10-7700
244227005	RE12-10-7699
244227006	RE12-10-7727
244227007	RE12-10-7710
244227008	RE12-10-7715
244227009	RE12-10-7707
244227010	RE12-10-7719
244227011	RE12-10-7717
244227012	RE12-10-7708
244227013	RE12-10-7706
244227014	RE12-10-7714
244227015	RE12-10-7705
1202011893	Method Blank (MB) **ICP**
1202011894	Laboratory Control Sample (LCS)
1202011897	244227001(RE12-10-7734L) Serial Dilution (SD)
1202011895	244227001(RE12-10-7734D) Sample Duplicate (DUP)
1202011896	244227001(RE12-10-7734S) Matrix Spike (MS)
1202011898	244227001(RE12-10-7734SD) Matrix Spike Duplicate (MSD)
1202011806	Method Blank (MB) **ICP-MS**
1202011807	Laboratory Control Sample (LCS)
1202011810	244227001(RE12-10-7734L) Serial Dilution (SD)
1202011808	244227001(RE12-10-7734D) Sample Duplicate (DUP)
1202011809	244227001(RE12-10-7734S) Matrix Spike (MS)
1202011811	244227001(RE12-10-7734SD) Matrix Spike Duplicate (MSD)
1202019704	Method Blank (MB) **CVAA**
1202019705	Laboratory Control Sample (LCS)

1202019708	244227001(RE12-10-7734L) Serial Dilution (SD)
1202019706	244227001(RE12-10-7734D) Sample Duplicate (DUP)
1202019707	244227001(RE12-10-7734S) Matrix Spike (MS)
1202019709	244227001(RE12-10-7734SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	940174, 940132 and 943287
Prep Batch :	940170, 940131 and 943286
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of

scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits with the exceptions of uranium, iron and potassium that recovered outside of the advisory control limits of 70-130%.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria with the exception of barium. The samples in this SDG contained barium at concentrations more than ten times the amount present in the method blank (MB), therefore the data was not adversely affected.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 244227001 (RE12-10-7734)-ICP, ICP-MS and CVAA.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of magnesium, manganese, potassium and sodium as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of nickel, magnesium and potassium as indicated by the "*" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exceptions of nickel and manganese as indicated by the "*" qualifiers.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exceptions of nickel and uranium as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were

diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DER was generated for this SDG: DER ID 781678 and 784657. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nikki A. Elmore **Date:** 2.3.10

Sample Data Summary

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227001 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7734 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 93.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2280000	ug/Kg		6980	20500	20500	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-36-0	Antimony	1030	ug/Kg	U	339	1030	1030	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-38-2	Arsenic	0.796	mg/kg	J	0.211	1.06	1.06	2	MS	BAJ	01/15/10 23:12	100115-3	940132
7440-39-3	Barium	20000	ug/Kg		103	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-41-7	Beryllium	0.414	mg/kg		0.0211	0.106	0.106	2	MS	BAJ	01/15/10 23:12	100115-3	940132
7440-43-9	Cadmium	513	ug/Kg	U	103	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-70-2	Calcium	553000	ug/Kg		8220	25700	25700	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-47-3	Chromium	11300	ug/Kg		154	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-48-4	Cobalt	736	ug/Kg		154	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-50-8	Copper	1730	ug/Kg		308	1030	1030	1	P	HSC	01/27/10 11:34	012710-1	940174
7439-89-6	Iron	8480000	ug/Kg		8220	25700	25700	1	P	HSC	01/27/10 11:34	012710-1	940174
7439-92-1	Lead	2450	ug/Kg		257	1030	1030	1	P	HSC	01/27/10 11:34	012710-1	940174
7439-95-4	Magnesium	412000	ug/Kg	N	8730	30800	30800	1	P	HSC	01/27/10 11:34	012710-1	940174
7439-96-5	Manganese	207000	ug/Kg	*N	205	1030	1030	1	P	HSC	01/27/10 11:34	012710-1	940174
7439-97-6	Mercury	12.7	ug/kg	U	4.31	12.7	12.7	1	AV	JXL1	01/28/10 09:17	012810S1-4	943287
7440-02-0	Nickel	3.06	mg/kg	*N	0.106	0.423	0.423	2	MS	BAJ	01/15/10 23:12	100115-3	940132
7440-09-7	Potassium	349000	ug/Kg	N	6570	25700	25700	1	P	HSC	01/27/10 11:34	012710-1	940174
7782-49-2	Selenium	1.06	mg/kg	U	0.529	1.06	1.06	2	MS	BAJ	01/15/10 23:12	100115-3	940132
7440-22-4	Silver	513	ug/Kg	U	103	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-23-5	Sodium	92400	ug/Kg	N	7190	25700	25700	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-28-0	Thallium	0.0926	mg/kg	J	0.0634	0.211	0.211	2	MS	SKJ	01/19/10 20:56	100119-2	940132
7440-61-1	Uranium	0.595	mg/kg	*	0.014	0.0423	0.0423	2	MS	BAJ	01/15/10 23:12	100115-3	940132
7440-62-2	Vanadium	4690	ug/Kg		103	513	513	1	P	HSC	01/27/10 11:34	012710-1	940174
7440-66-6	Zinc	38300	ug/Kg		339	1030	1030	1	P	HSC	01/27/10 11:34	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.521	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.506	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227002 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7701 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5340000	ug/Kg		8740	25700	25700	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-36-0	Antimony	1280	ug/Kg	U	424	1280	1280	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-38-2	Arsenic	1.56	mg/kg		0.257	1.29	1.29	2	MS	BAJ	01/15/10 23:55	100115-3	940132
7440-39-3	Barium	59900	ug/Kg		128	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-41-7	Beryllium	0.457	mg/kg		0.0257	0.129	0.129	2	MS	BAJ	01/15/10 23:55	100115-3	940132
7440-43-9	Cadmium	228	ug/Kg	J	128	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-70-2	Calcium	988000	ug/Kg		10300	32100	32100	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-47-3	Chromium	8360	ug/Kg		193	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-48-4	Cobalt	2010	ug/Kg		193	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-50-8	Copper	6670	ug/Kg		385	1280	1280	1	P	HSC	01/27/10 11:59	012710-1	940174
7439-89-6	Iron	13500000	ug/Kg		10300	32100	32100	1	P	HSC	01/27/10 11:59	012710-1	940174
7439-92-1	Lead	10700	ug/Kg		321	1280	1280	1	P	HSC	01/27/10 11:59	012710-1	940174
7439-95-4	Magnesium	1090000	ug/Kg	N	10900	38500	38500	1	P	HSC	01/27/10 11:59	012710-1	940174
7439-96-5	Manganese	314000	ug/Kg	*N	257	1280	1280	1	P	HSC	01/27/10 11:59	012710-1	940174
7439-97-6	Mercury	8.61	ug/kg	J	5.32	15.7	15.7	1	AV	JXL1	01/28/10 09:25	012810S1-4	943287
7440-02-0	Nickel	3.78	mg/kg	*N	0.129	0.515	0.515	2	MS	BAJ	01/15/10 23:55	100115-3	940132
7440-09-7	Potassium	834000	ug/Kg	N	8220	32100	32100	1	P	HSC	01/27/10 11:59	012710-1	940174
7782-49-2	Selenium	1.29	mg/kg	U	0.644	1.29	1.29	2	MS	BAJ	01/15/10 23:55	100115-3	940132
7440-22-4	Silver	642	ug/Kg	U	128	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-23-5	Sodium	85900	ug/Kg	N	8990	32100	32100	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-28-0	Thallium	0.0875	mg/kg	J	0.0772	0.257	0.257	2	MS	SKJ	01/19/10 21:22	100119-2	940132
7440-61-1	Uranium	4.92	mg/kg	*	0.017	0.0515	0.0515	2	MS	BAJ	01/15/10 23:55	100115-3	940132
7440-62-2	Vanadium	12300	ug/Kg		128	642	642	1	P	HSC	01/27/10 11:59	012710-1	940174
7440-66-6	Zinc	52400	ug/Kg		424	1280	1280	1	P	HSC	01/27/10 11:59	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.522	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.523	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.515	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227003 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7702 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3850000	ug/Kg		7370	21700	21700	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-36-0	Antimony	1080	ug/Kg	U	358	1080	1080	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-38-2	Arsenic	1.34	mg/kg		0.232	1.16	1.16	2	MS	BAJ	01/16/10 00:01	100115-3	940132
7440-39-3	Barium	31100	ug/Kg		108	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-41-7	Beryllium	0.532	mg/kg		0.0232	0.116	0.116	2	MS	BAJ	01/16/10 00:01	100115-3	940132
7440-43-9	Cadmium	542	ug/Kg	U	108	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-70-2	Calcium	721000	ug/Kg		8670	27100	27100	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-47-3	Chromium	11400	ug/Kg		163	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-48-4	Cobalt	1030	ug/Kg		163	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-50-8	Copper	2620	ug/Kg		325	1080	1080	1	P	HSC	01/27/10 12:03	012710-1	940174
7439-89-6	Iron	9650000	ug/Kg		8670	27100	27100	1	P	HSC	01/27/10 12:03	012710-1	940174
7439-92-1	Lead	3800	ug/Kg		271	1080	1080	1	P	HSC	01/27/10 12:03	012710-1	940174
7439-95-4	Magnesium	720000	ug/Kg	N	9210	32500	32500	1	P	HSC	01/27/10 12:03	012710-1	940174
7439-96-5	Manganese	280000	ug/Kg	*N	217	1080	1080	1	P	HSC	01/27/10 12:03	012710-1	940174
7439-97-6	Mercury	8.53	ug/kg	J	4.23	12.5	12.5	1	AV	JXL1	01/28/10 09:26	012810S1-4	943287
7440-02-0	Nickel	3.07	mg/kg	*N	0.116	0.464	0.464	2	MS	BAJ	01/16/10 00:01	100115-3	940132
7440-09-7	Potassium	520000	ug/Kg	N	6930	27100	27100	1	P	HSC	01/27/10 12:03	012710-1	940174
7782-49-2	Selenium	1.16	mg/kg	U	0.58	1.16	1.16	2	MS	BAJ	01/16/10 00:01	100115-3	940132
7440-22-4	Silver	542	ug/Kg	U	108	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-23-5	Sodium	94600	ug/Kg	N	7580	27100	27100	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-28-0	Thallium	0.232	mg/kg	U	0.0696	0.232	0.232	2	MS	SKJ	01/19/10 21:33	100119-2	940132
7440-61-1	Uranium	1.04	mg/kg	*	0.0153	0.0464	0.0464	2	MS	BAJ	01/16/10 00:01	100115-3	940132
7440-62-2	Vanadium	6580	ug/Kg		108	542	542	1	P	HSC	01/27/10 12:03	012710-1	940174
7440-66-6	Zinc	39100	ug/Kg		358	1080	1080	1	P	HSC	01/27/10 12:03	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.507	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.543	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.567	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227004 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7700 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 93.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3750000	ug/Kg		7020	20700	20700	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-36-0	Antimony	1030	ug/Kg	U	341	1030	1030	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-38-2	Arsenic	1.03	mg/kg		0.196	0.979	0.979	2	MS	BAJ	01/16/10 00:08	100115-3	940132
7440-39-3	Barium	49200	ug/Kg		103	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-41-7	Beryllium	0.349	mg/kg		0.0196	0.0979	0.0979	2	MS	BAJ	01/16/10 00:08	100115-3	940132
7440-43-9	Cadmium	516	ug/Kg	U	103	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-70-2	Calcium	990000	ug/Kg		8260	25800	25800	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-47-3	Chromium	22900	ug/Kg		155	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-48-4	Cobalt	1380	ug/Kg		155	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-50-8	Copper	3300	ug/Kg		310	1030	1030	1	P	HSC	01/27/10 12:07	012710-1	940174
7439-89-6	Iron	12100000	ug/Kg		8260	25800	25800	1	P	HSC	01/27/10 12:07	012710-1	940174
7439-92-1	Lead	3850	ug/Kg		258	1030	1030	1	P	HSC	01/27/10 12:07	012710-1	940174
7439-95-4	Magnesium	1010000	ug/Kg	N	8780	31000	31000	1	P	HSC	01/27/10 12:07	012710-1	940174
7439-96-5	Manganese	166000	ug/Kg	*N	207	1030	1030	1	P	HSC	01/27/10 12:07	012710-1	940174
7439-97-6	Mercury	13.1	ug/kg		4.13	12.1	12.1	1	AV	JXL1	01/28/10 09:28	012810S1-4	943287
7440-02-0	Nickel	4.09	mg/kg	*N	0.0979	0.392	0.392	2	MS	BAJ	01/16/10 00:08	100115-3	940132
7440-09-7	Potassium	745000	ug/Kg	N	6610	25800	25800	1	P	HSC	01/27/10 12:07	012710-1	940174
7782-49-2	Selenium	0.979	mg/kg	U	0.49	0.979	0.979	2	MS	BAJ	01/16/10 00:08	100115-3	940132
7440-22-4	Silver	516	ug/Kg	U	103	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-23-5	Sodium	215000	ug/Kg	N	7230	25800	25800	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-28-0	Thallium	0.0668	mg/kg	J	0.0588	0.196	0.196	2	MS	SKJ	01/19/10 21:36	100119-2	940132
7440-61-1	Uranium	0.397	mg/kg	*	0.0129	0.0392	0.0392	2	MS	BAJ	01/16/10 00:08	100115-3	940132
7440-62-2	Vanadium	10000	ug/Kg		103	516	516	1	P	HSC	01/27/10 12:07	012710-1	940174
7440-66-6	Zinc	40100	ug/Kg		341	1030	1030	1	P	HSC	01/27/10 12:07	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.545	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.517	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.528	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227005 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7699 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9430000	ug/Kg		8170	24000	24000	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-36-0	Antimony	433	ug/Kg	J	397	1200	1200	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-38-2	Arsenic	2.4	mg/kg		0.245	1.22	1.22	2	MS	BAJ	01/16/10 00:14	100115-3	940132
7440-39-3	Barium	101000	ug/Kg		120	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-41-7	Beryllium	0.806	mg/kg		0.0245	0.122	0.122	2	MS	BAJ	01/16/10 00:14	100115-3	940132
7440-43-9	Cadmium	601	ug/Kg	U	120	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-70-2	Calcium	1830000	ug/Kg		9610	30000	30000	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-47-3	Chromium	42900	ug/Kg		180	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-48-4	Cobalt	4860	ug/Kg		180	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-50-8	Copper	5920	ug/Kg		361	1200	1200	1	P	HSC	01/27/10 12:10	012710-1	940174
7439-89-6	Iron	16000000	ug/Kg		9610	30000	30000	1	P	HSC	01/27/10 12:10	012710-1	940174
7439-92-1	Lead	12000	ug/Kg		300	1200	1200	1	P	HSC	01/27/10 12:10	012710-1	940174
7439-95-4	Magnesium	1720000	ug/Kg	N	10200	36100	36100	1	P	HSC	01/27/10 12:10	012710-1	940174
7439-96-5	Manganese	301000	ug/Kg	*N	240	1200	1200	1	P	HSC	01/27/10 12:10	012710-1	940174
7439-97-6	Mercury	17.5	ug/kg		4.47	13.1	13.1	1	AV	JXL1	01/28/10 09:33	012810S1-4	943287
7440-02-0	Nickel	9.08	mg/kg	*N	0.122	0.489	0.489	2	MS	BAJ	01/16/10 00:14	100115-3	940132
7440-09-7	Potassium	1640000	ug/Kg	N	7690	30000	30000	1	P	HSC	01/27/10 12:10	012710-1	940174
7782-49-2	Selenium	1.22	mg/kg	U	0.611	1.22	1.22	2	MS	BAJ	01/16/10 00:14	100115-3	940132
7440-22-4	Silver	601	ug/Kg	U	120	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-23-5	Sodium	81200	ug/Kg	N	8410	30000	30000	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-28-0	Thallium	0.165	mg/kg	J	0.0734	0.245	0.245	2	MS	SKJ	01/19/10 21:40	100119-2	940132
7440-61-1	Uranium	3.59	mg/kg	*	0.0161	0.0489	0.0489	2	MS	BAJ	01/16/10 00:14	100115-3	940132
7440-62-2	Vanadium	25000	ug/Kg		120	601	601	1	P	HSC	01/27/10 12:10	012710-1	940174
7440-66-6	Zinc	41000	ug/Kg		397	1200	1200	1	P	HSC	01/27/10 12:10	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.514	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.523	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.574	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227006 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7727 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 75

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4800000	ug/Kg		8900	26200	26200	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-36-0	Antimony	1310	ug/Kg	U	432	1310	1310	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-38-2	Arsenic	1.87	mg/kg		0.261	1.31	1.31	2	MS	BAJ	01/16/10 00:20	100115-3	940132
7440-39-3	Barium	52200	ug/Kg		131	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-41-7	Beryllium	0.535	mg/kg		0.0261	0.131	0.131	2	MS	BAJ	01/16/10 00:20	100115-3	940132
7440-43-9	Cadmium	655	ug/Kg	U	131	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-70-2	Calcium	1060000	ug/Kg		10500	32700	32700	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-47-3	Chromium	9310	ug/Kg		196	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-48-4	Cobalt	2270	ug/Kg		196	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-50-8	Copper	3970	ug/Kg		393	1310	1310	1	P	HSC	01/27/10 12:14	012710-1	940174
7439-89-6	Iron	14500000	ug/Kg		10500	32700	32700	1	P	HSC	01/27/10 12:14	012710-1	940174
7439-92-1	Lead	9810	ug/Kg		327	1310	1310	1	P	HSC	01/27/10 12:14	012710-1	940174
7439-95-4	Magnesium	924000	ug/Kg	N	11100	39300	39300	1	P	HSC	01/27/10 12:14	012710-1	940174
7439-96-5	Manganese	302000	ug/Kg	*N	262	1310	1310	1	P	HSC	01/27/10 12:14	012710-1	940174
7439-97-6	Mercury	18.2	ug/kg		5.4	15.9	15.9	1	AV	JXL1	01/28/10 09:35	012810S1-4	943287
7440-02-0	Nickel	3.81	mg/kg	*N	0.131	0.523	0.523	2	MS	BAJ	01/16/10 00:20	100115-3	940132
7440-09-7	Potassium	730000	ug/Kg	N	8380	32700	32700	1	P	HSC	01/27/10 12:14	012710-1	940174
7782-49-2	Selenium	1.31	mg/kg	U	0.653	1.31	1.31	2	MS	BAJ	01/16/10 00:20	100115-3	940132
7440-22-4	Silver	655	ug/Kg	U	131	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-23-5	Sodium	69100	ug/Kg	N	9170	32700	32700	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-28-0	Thallium	0.0802	mg/kg	J	0.0784	0.261	0.261	2	MS	SKJ	01/19/10 21:44	100119-2	940132
7440-61-1	Uranium	3.66	mg/kg	*	0.0173	0.0523	0.0523	2	MS	BAJ	01/16/10 00:20	100115-3	940132
7440-62-2	Vanadium	15200	ug/Kg		131	655	655	1	P	HSC	01/27/10 12:14	012710-1	940174
7440-66-6	Zinc	55300	ug/Kg		432	1310	1310	1	P	HSC	01/27/10 12:14	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.512	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.511	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.506	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227007 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7710 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 93.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2380000	ug/Kg		7050	20700	20700	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-36-0	Antimony	1040	ug/Kg	U	342	1040	1040	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-38-2	Arsenic	0.746	mg/kg	J	0.204	1.02	1.02	2	MS	BAJ	01/16/10 00:26	100115-3	940132
7440-39-3	Barium	23200	ug/Kg		104	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-41-7	Beryllium	0.326	mg/kg		0.0204	0.102	0.102	2	MS	BAJ	01/16/10 00:26	100115-3	940132
7440-43-9	Cadmium	519	ug/Kg	U	104	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-70-2	Calcium	591000	ug/Kg		8300	25900	25900	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-47-3	Chromium	12800	ug/Kg		156	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-48-4	Cobalt	805	ug/Kg		156	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-50-8	Copper	1870	ug/Kg		311	1040	1040	1	P	HSC	01/27/10 12:18	012710-1	940174
7439-89-6	Iron	9540000	ug/Kg		8300	25900	25900	1	P	HSC	01/27/10 12:18	012710-1	940174
7439-92-1	Lead	3170	ug/Kg		259	1040	1040	1	P	HSC	01/27/10 12:18	012710-1	940174
7439-95-4	Magnesium	440000	ug/Kg	N	8820	31100	31100	1	P	HSC	01/27/10 12:18	012710-1	940174
7439-96-5	Manganese	270000	ug/Kg	*N	207	1040	1040	1	P	HSC	01/27/10 12:18	012710-1	940174
7439-97-6	Mercury	11.3	ug/kg	U	3.86	11.3	11.3	1	AV	JXL1	01/28/10 09:36	012810S1-4	943287
7440-02-0	Nickel	2.17	mg/kg	*N	0.102	0.408	0.408	2	MS	BAJ	01/16/10 00:26	100115-3	940132
7440-09-7	Potassium	369000	ug/Kg	N	6640	25900	25900	1	P	HSC	01/27/10 12:18	012710-1	940174
7782-49-2	Selenium	1.02	mg/kg	U	0.511	1.02	1.02	2	MS	BAJ	01/16/10 00:26	100115-3	940132
7440-22-4	Silver	519	ug/Kg	U	104	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-23-5	Sodium	103000	ug/Kg	N	7260	25900	25900	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-28-0	Thallium	0.204	mg/kg	U	0.0613	0.204	0.204	2	MS	SKJ	01/19/10 21:55	100119-2	940132
7440-61-1	Uranium	0.457	mg/kg	*	0.0135	0.0408	0.0408	2	MS	BAJ	01/16/10 00:26	100115-3	940132
7440-62-2	Vanadium	5290	ug/Kg		104	519	519	1	P	HSC	01/27/10 12:18	012710-1	940174
7440-66-6	Zinc	43500	ug/Kg		342	1040	1040	1	P	HSC	01/27/10 12:18	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.523	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.515	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.565	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227008 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7715 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6720000	ug/Kg		8950	26300	26300	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-36-0	Antimony	631	ug/Kg	J	434	1320	1320	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-38-2	Arsenic	2.5	mg/kg		0.258	1.29	1.29	2	MS	BAJ	01/16/10 00:32	100115-3	940132
7440-39-3	Barium	121000	ug/Kg		132	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-41-7	Beryllium	0.722	mg/kg		0.0258	0.129	0.129	2	MS	BAJ	01/16/10 00:32	100115-3	940132
7440-43-9	Cadmium	364	ug/Kg	J	132	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-70-2	Calcium	4640000	ug/Kg		10500	32900	32900	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-47-3	Chromium	13000	ug/Kg		197	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-48-4	Cobalt	3440	ug/Kg		197	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-50-8	Copper	9440	ug/Kg		395	1320	1320	1	P	HSC	01/27/10 12:21	012710-1	940174
7439-89-6	Iron	12400000	ug/Kg		10500	32900	32900	1	P	HSC	01/27/10 12:21	012710-1	940174
7439-92-1	Lead	20200	ug/Kg		329	1320	1320	1	P	HSC	01/27/10 12:21	012710-1	940174
7439-95-4	Magnesium	1710000	ug/Kg	N	11200	39500	39500	1	P	HSC	01/27/10 12:21	012710-1	940174
7439-96-5	Manganese	451000	ug/Kg	*N	263	1320	1320	1	P	HSC	01/27/10 12:21	012710-1	940174
7439-97-6	Mercury	16.2	ug/kg		5.24	15.4	15.4	1	AV	JXL1	01/28/10 09:38	012810S1-4	943287
7440-02-0	Nickel	6.05	mg/kg	*N	0.129	0.516	0.516	2	MS	BAJ	01/16/10 00:32	100115-3	940132
7440-09-7	Potassium	1590000	ug/Kg	N	8420	32900	32900	1	P	HSC	01/27/10 12:21	012710-1	940174
7782-49-2	Selenium	1.29	mg/kg	U	0.646	1.29	1.29	2	MS	BAJ	01/16/10 00:32	100115-3	940132
7440-22-4	Silver	658	ug/Kg	U	132	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-23-5	Sodium	107000	ug/Kg	N	9210	32900	32900	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-28-0	Thallium	0.130	mg/kg	J	0.0775	0.258	0.258	2	MS	SKJ	01/19/10 21:59	100119-2	940132
7440-61-1	Uranium	8.43	mg/kg	*	0.017	0.0516	0.0516	2	MS	BAJ	01/16/10 00:32	100115-3	940132
7440-62-2	Vanadium	16300	ug/Kg		132	658	658	1	P	HSC	01/27/10 12:21	012710-1	940174
7440-66-6	Zinc	55800	ug/Kg		434	1320	1320	1	P	HSC	01/27/10 12:21	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.523	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.513	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.526	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227009 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7707 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 79

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7330000	ug/Kg		8550	25100	25100	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-36-0	Antimony	1260	ug/Kg	U	415	1260	1260	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-38-2	Arsenic	2.16	mg/kg		0.25	1.25	1.25	2	MS	BAJ	01/16/10 00:51	100115-3	940132
7440-39-3	Barium	96900	ug/Kg		126	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-41-7	Beryllium	0.645	mg/kg		0.025	0.125	0.125	2	MS	BAJ	01/16/10 00:51	100115-3	940132
7440-43-9	Cadmium	187	ug/Kg	J	126	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-70-2	Calcium	1850000	ug/Kg		10100	31400	31400	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-47-3	Chromium	23900	ug/Kg		189	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-48-4	Cobalt	4520	ug/Kg		189	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-50-8	Copper	7150	ug/Kg		377	1260	1260	1	P	HSC	01/27/10 12:32	012710-1	940174
7439-89-6	Iron	14100000	ug/Kg		10100	31400	31400	1	P	HSC	01/27/10 12:32	012710-1	940174
7439-92-1	Lead	13900	ug/Kg		314	1260	1260	1	P	HSC	01/27/10 12:32	012710-1	940174
7439-95-4	Magnesium	1380000	ug/Kg	N	10700	37700	37700	1	P	HSC	01/27/10 12:32	012710-1	940174
7439-96-5	Manganese	355000	ug/Kg	*N	251	1260	1260	1	P	HSC	01/27/10 12:32	012710-1	940174
7439-97-6	Mercury	17.1	ug/kg		4.78	14.1	14.1	1	AV	JXL1	01/28/10 09:40	012810S1-4	943287
7440-02-0	Nickel	6.29	mg/kg	*N	0.125	0.5	0.5	2	MS	BAJ	01/16/10 00:51	100115-3	940132
7440-09-7	Potassium	1280000	ug/Kg	N	8040	31400	31400	1	P	HSC	01/27/10 12:32	012710-1	940174
7782-49-2	Selenium	1.25	mg/kg	U	0.625	1.25	1.25	2	MS	BAJ	01/16/10 00:51	100115-3	940132
7440-22-4	Silver	628	ug/Kg	U	126	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-23-5	Sodium	74300	ug/Kg	N	8800	31400	31400	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-28-0	Thallium	0.146	mg/kg	J	0.075	0.25	0.25	2	MS	SKJ	01/19/10 22:03	100119-2	940132
7440-61-1	Uranium	5.55	mg/kg	*	0.0165	0.05	0.05	2	MS	BAJ	01/16/10 00:51	100115-3	940132
7440-62-2	Vanadium	22200	ug/Kg		126	628	628	1	P	HSC	01/27/10 12:32	012710-1	940174
7440-66-6	Zinc	42300	ug/Kg		415	1260	1260	1	P	HSC	01/27/10 12:32	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.509	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.506	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.543	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227010 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7719 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 83

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3590000	ug/Kg		8070	23700	23700	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-36-0	Antimony	1190	ug/Kg	U	392	1190	1190	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-38-2	Arsenic	1.59	mg/kg		0.224	1.12	1.12	2	MS	BAJ	01/16/10 00:57	100115-3	940132
7440-39-3	Barium	36900	ug/Kg		119	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-41-7	Beryllium	0.435	mg/kg		0.0224	0.112	0.112	2	MS	BAJ	01/16/10 00:57	100115-3	940132
7440-43-9	Cadmium	594	ug/Kg	U	119	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-70-2	Calcium	1190000	ug/Kg		9500	29700	29700	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-47-3	Chromium	8030	ug/Kg		178	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-48-4	Cobalt	1690	ug/Kg		178	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-50-8	Copper	3330	ug/Kg		356	1190	1190	1	P	HSC	01/27/10 12:36	012710-1	940174
7439-89-6	Iron	12800000	ug/Kg		9500	29700	29700	1	P	HSC	01/27/10 12:36	012710-1	940174
7439-92-1	Lead	8120	ug/Kg		297	1190	1190	1	P	HSC	01/27/10 12:36	012710-1	940174
7439-95-4	Magnesium	782000	ug/Kg	N	10100	35600	35600	1	P	HSC	01/27/10 12:36	012710-1	940174
7439-96-5	Manganese	203000	ug/Kg	*N	237	1190	1190	1	P	HSC	01/27/10 12:36	012710-1	940174
7439-97-6	Mercury	10.8	ug/kg	J	4.45	13.1	13.1	1	AV	JXL1	01/28/10 09:42	012810S1-4	943287
7440-02-0	Nickel	3.58	mg/kg	*N	0.112	0.448	0.448	2	MS	BAJ	01/16/10 00:57	100115-3	940132
7440-09-7	Potassium	634000	ug/Kg	N	7600	29700	29700	1	P	HSC	01/27/10 12:36	012710-1	940174
7782-49-2	Selenium	1.12	mg/kg	U	0.56	1.12	1.12	2	MS	BAJ	01/16/10 00:57	100115-3	940132
7440-22-4	Silver	594	ug/Kg	U	119	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-23-5	Sodium	80300	ug/Kg	N	8310	29700	29700	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-28-0	Thallium	0.0711	mg/kg	J	0.0672	0.224	0.224	2	MS	SKJ	01/19/10 22:06	100119-2	940132
7440-61-1	Uranium	3.18	mg/kg	*	0.0148	0.0448	0.0448	2	MS	BAJ	01/16/10 00:57	100115-3	940132
7440-62-2	Vanadium	13200	ug/Kg		119	594	594	1	P	HSC	01/27/10 12:36	012710-1	940174
7440-66-6	Zinc	47400	ug/Kg		392	1190	1190	1	P	HSC	01/27/10 12:36	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.535	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.55	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227011 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7717 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2980000	ug/Kg		8290	24400	24400	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-36-0	Antimony	1220	ug/Kg	U	402	1220	1220	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-38-2	Arsenic	0.886	mg/kg	J	0.241	1.2	1.2	2	MS	BAJ	01/16/10 01:03	100115-3	940132
7440-39-3	Barium	31100	ug/Kg		122	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-41-7	Beryllium	0.233	mg/kg		0.0241	0.12	0.12	2	MS	BAJ	01/16/10 01:03	100115-3	940132
7440-43-9	Cadmium	132	ug/Kg	J	122	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-70-2	Calcium	588000	ug/Kg		9750	30500	30500	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-47-3	Chromium	2820	ug/Kg		183	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-48-4	Cobalt	1470	ug/Kg		183	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-50-8	Copper	2510	ug/Kg		366	1220	1220	1	P	HSC	01/27/10 12:40	012710-1	940174
7439-89-6	Iron	7800000	ug/Kg		9750	30500	30500	1	P	HSC	01/27/10 12:40	012710-1	940174
7439-92-1	Lead	6550	ug/Kg		305	1220	1220	1	P	HSC	01/27/10 12:40	012710-1	940174
7439-95-4	Magnesium	576000	ug/Kg	N	10400	36600	36600	1	P	HSC	01/27/10 12:40	012710-1	940174
7439-96-5	Manganese	203000	ug/Kg	*N	244	1220	1220	1	P	HSC	01/27/10 12:40	012710-1	940174
7439-97-6	Mercury	12.5	ug/kg	U	4.24	12.5	12.5	1	AV	JXL1	01/28/10 09:43	012810S1-4	943287
7440-02-0	Nickel	1.79	mg/kg	*N	0.12	0.482	0.482	2	MS	BAJ	01/16/10 01:03	100115-3	940132
7440-09-7	Potassium	554000	ug/Kg	N	7800	30500	30500	1	P	HSC	01/27/10 12:40	012710-1	940174
7782-49-2	Selenium	1.2	mg/kg	U	0.602	1.2	1.2	2	MS	BAJ	01/16/10 01:03	100115-3	940132
7440-22-4	Silver	609	ug/Kg	U	122	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-23-5	Sodium	42300	ug/Kg	N	8530	30500	30500	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-28-0	Thallium	0.241	mg/kg	U	0.0722	0.241	0.241	2	MS	SKJ	01/19/10 22:17	100119-2	940132
7440-61-1	Uranium	1.56	mg/kg	*	0.0159	0.0482	0.0482	2	MS	BAJ	01/16/10 01:03	100115-3	940132
7440-62-2	Vanadium	7980	ug/Kg		122	609	609	1	P	HSC	01/27/10 12:40	012710-1	940174
7440-66-6	Zinc	30300	ug/Kg		402	1220	1220	1	P	HSC	01/27/10 12:40	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.508	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.502	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.589	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227012 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7708 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 96.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10800000	ug/Kg		6730	19800	19800	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-36-0	Antimony	990	ug/Kg	U	327	990	990	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-38-2	Arsenic	1.77	mg/kg		0.206	1.03	1.03	2	MS	BAJ	01/16/10 01:09	100115-3	940132
7440-39-3	Barium	197000	ug/Kg		99	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-41-7	Beryllium	0.675	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	01/16/10 01:09	100115-3	940132
7440-43-9	Cadmium	133	ug/Kg	J	99	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-70-2	Calcium	2780000	ug/Kg		7920	24700	24700	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-47-3	Chromium	12400	ug/Kg		148	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-48-4	Cobalt	5700	ug/Kg		148	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-50-8	Copper	6770	ug/Kg		297	990	990	1	P	HSC	01/27/10 12:44	012710-1	940174
7439-89-6	Iron	14000000	ug/Kg		7920	24700	24700	1	P	HSC	01/27/10 12:44	012710-1	940174
7439-92-1	Lead	15400	ug/Kg		247	990	990	1	P	HSC	01/27/10 12:44	012710-1	940174
7439-95-4	Magnesium	1910000	ug/Kg	N	8410	29700	29700	1	P	HSC	01/27/10 12:44	012710-1	940174
7439-96-5	Manganese	438000	ug/Kg	*N	198	990	990	1	P	HSC	01/27/10 12:44	012710-1	940174
7439-97-6	Mercury	8	ug/kg	J	4	11.8	11.8	1	AV	JXL1	01/28/10 09:45	012810S1-4	943287
7440-02-0	Nickel	5.75	mg/kg	*N	0.103	0.412	0.412	2	MS	BAJ	01/16/10 01:09	100115-3	940132
7440-09-7	Potassium	1660000	ug/Kg	N	6330	24700	24700	1	P	HSC	01/27/10 12:44	012710-1	940174
7782-49-2	Selenium	1.03	mg/kg	U	0.516	1.03	1.03	2	MS	BAJ	01/16/10 01:09	100115-3	940132
7440-22-4	Silver	495	ug/Kg	U	99	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-23-5	Sodium	95700	ug/Kg	N	6930	24700	24700	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-28-0	Thallium	0.151	mg/kg	J	0.0619	0.206	0.206	2	MS	SKJ	01/19/10 22:21	100119-2	940132
7440-61-1	Uranium	0.999	mg/kg	*	0.0136	0.0412	0.0412	2	MS	BAJ	01/16/10 01:09	100115-3	940132
7440-62-2	Vanadium	27800	ug/Kg		99	495	495	1	P	HSC	01/27/10 12:44	012710-1	940174
7440-66-6	Zinc	28200	ug/Kg		327	990	990	1	P	HSC	01/27/10 12:44	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.501	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.522	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.527	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227013 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7706 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10800000	ug/Kg		7230	21300	21300	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-36-0	Antimony	438	ug/Kg	J	351	1060	1060	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-38-2	Arsenic	1.78	mg/kg		0.22	1.1	1.1	2	MS	BAJ	01/16/10 01:15	100115-3	940132
7440-39-3	Barium	102000	ug/Kg		106	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-41-7	Beryllium	0.816	mg/kg		0.022	0.11	0.11	2	MS	BAJ	01/16/10 01:15	100115-3	940132
7440-43-9	Cadmium	532	ug/Kg	U	106	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-70-2	Calcium	1850000	ug/Kg		8510	26600	26600	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-47-3	Chromium	14700	ug/Kg		160	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-48-4	Cobalt	3150	ug/Kg		160	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-50-8	Copper	6600	ug/Kg		319	1060	1060	1	P	HSC	01/27/10 12:47	012710-1	940174
7439-89-6	Iron	14600000	ug/Kg		8510	26600	26600	1	P	HSC	01/27/10 12:47	012710-1	940174
7439-92-1	Lead	8610	ug/Kg		266	1060	1060	1	P	HSC	01/27/10 12:47	012710-1	940174
7439-95-4	Magnesium	2060000	ug/Kg	N	9040	31900	31900	1	P	HSC	01/27/10 12:47	012710-1	940174
7439-96-5	Manganese	167000	ug/Kg	*N	213	1060	1060	1	P	HSC	01/27/10 12:47	012710-1	940174
7439-97-6	Mercury	23.5	ug/kg		4.42	13	13	1	AV	JXL1	01/28/10 09:47	012810S1-4	943287
7440-02-0	Nickel	6.8	mg/kg	*N	0.11	0.44	0.44	2	MS	BAJ	01/16/10 01:15	100115-3	940132
7440-09-7	Potassium	1800000	ug/Kg	N	6810	26600	26600	1	P	HSC	01/27/10 12:47	012710-1	940174
7782-49-2	Selenium	1.1	mg/kg	U	0.55	1.1	1.1	2	MS	BAJ	01/16/10 01:15	100115-3	940132
7440-22-4	Silver	532	ug/Kg	U	106	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-23-5	Sodium	96300	ug/Kg	N	7440	26600	26600	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-28-0	Thallium	0.154	mg/kg	J	0.0659	0.22	0.22	2	MS	SKJ	01/19/10 22:25	100119-2	940132
7440-61-1	Uranium	0.736	mg/kg	*	0.0145	0.044	0.044	2	MS	BAJ	01/16/10 01:15	100115-3	940132
7440-62-2	Vanadium	19100	ug/Kg		106	532	532	1	P	HSC	01/27/10 12:47	012710-1	940174
7440-66-6	Zinc	36300	ug/Kg		351	1060	1060	1	P	HSC	01/27/10 12:47	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.507	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.524	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.514	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227014 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7714 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4710000	ug/Kg		7230	21300	21300	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-36-0	Antimony	1060	ug/Kg	U	351	1060	1060	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-38-2	Arsenic	2.04	mg/kg		0.213	1.07	1.07	2	MS	BAJ	01/16/10 01:22	100115-3	940132
7440-39-3	Barium	52400	ug/Kg		106	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-41-7	Beryllium	0.640	mg/kg		0.0213	0.107	0.107	2	MS	BAJ	01/16/10 01:22	100115-3	940132
7440-43-9	Cadmium	532	ug/Kg	U	106	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-70-2	Calcium	1080000	ug/Kg		8510	26600	26600	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-47-3	Chromium	5070	ug/Kg		160	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-48-4	Cobalt	2370	ug/Kg		160	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-50-8	Copper	3540	ug/Kg		319	1060	1060	1	P	HSC	01/27/10 12:51	012710-1	940174
7439-89-6	Iron	11700000	ug/Kg		8510	26600	26600	1	P	HSC	01/27/10 12:51	012710-1	940174
7439-92-1	Lead	6560	ug/Kg		266	1060	1060	1	P	HSC	01/27/10 12:51	012710-1	940174
7439-95-4	Magnesium	904000	ug/Kg	N	9040	31900	31900	1	P	HSC	01/27/10 12:51	012710-1	940174
7439-96-5	Manganese	321000	ug/Kg	*N	213	1060	1060	1	P	HSC	01/27/10 12:51	012710-1	940174
7439-97-6	Mercury	11.5	ug/kg	J	4.32	12.7	12.7	1	AV	JXL1	01/28/10 09:48	012810S1-4	943287
7440-02-0	Nickel	3.21	mg/kg	*N	0.107	0.426	0.426	2	MS	BAJ	01/16/10 01:22	100115-3	940132
7440-09-7	Potassium	681000	ug/Kg	N	6810	26600	26600	1	P	HSC	01/27/10 12:51	012710-1	940174
7782-49-2	Selenium	1.07	mg/kg	U	0.533	1.07	1.07	2	MS	BAJ	01/16/10 01:22	100115-3	940132
7440-22-4	Silver	532	ug/Kg	U	106	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-23-5	Sodium	85100	ug/Kg	N	7450	26600	26600	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-28-0	Thallium	0.0689	mg/kg	J	0.064	0.213	0.213	2	MS	SKJ	01/19/10 22:29	100119-2	940132
7440-61-1	Uranium	0.557	mg/kg	*	0.0141	0.0426	0.0426	2	MS	BAJ	01/16/10 01:22	100115-3	940132
7440-62-2	Vanadium	12700	ug/Kg		106	532	532	1	P	HSC	01/27/10 12:51	012710-1	940174
7440-66-6	Zinc	38400	ug/Kg		351	1060	1060	1	P	HSC	01/27/10 12:51	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.519	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.52	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.523	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244227015 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7705 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6290000	ug/Kg		7690	22600	22600	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-36-0	Antimony	1130	ug/Kg	U	373	1130	1130	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-38-2	Arsenic	1.32	mg/kg		0.23	1.15	1.15	2	MS	BAJ	01/16/10 01:28	100115-3	940132
7440-39-3	Barium	75900	ug/Kg		113	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-41-7	Beryllium	0.548	mg/kg		0.023	0.115	0.115	2	MS	BAJ	01/16/10 01:28	100115-3	940132
7440-43-9	Cadmium	565	ug/Kg	U	113	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-70-2	Calcium	1010000	ug/Kg		9040	28300	28300	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-47-3	Chromium	19200	ug/Kg		170	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-48-4	Cobalt	3800	ug/Kg		170	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-50-8	Copper	7870	ug/Kg		339	1130	1130	1	P	HSC	01/27/10 12:55	012710-1	940174
7439-89-6	Iron	12200000	ug/Kg		9040	28300	28300	1	P	HSC	01/27/10 12:55	012710-1	940174
7439-92-1	Lead	7650	ug/Kg		283	1130	1130	1	P	HSC	01/27/10 12:55	012710-1	940174
7439-95-4	Magnesium	1180000	ug/Kg	N	9610	33900	33900	1	P	HSC	01/27/10 12:55	012710-1	940174
7439-96-5	Manganese	286000	ug/Kg	*N	226	1130	1130	1	P	HSC	01/27/10 12:55	012710-1	940174
7439-97-6	Mercury	6.32	ug/kg	J	4.48	13.2	13.2	1	AV	JXL1	01/28/10 09:53	012810S1-4	943287
7440-02-0	Nickel	6.08	mg/kg	*N	0.115	0.461	0.461	2	MS	BAJ	01/16/10 01:28	100115-3	940132
7440-09-7	Potassium	1220000	ug/Kg	N	7230	28300	28300	1	P	HSC	01/27/10 12:55	012710-1	940174
7782-49-2	Selenium	1.15	mg/kg	U	0.576	1.15	1.15	2	MS	BAJ	01/16/10 01:28	100115-3	940132
7440-22-4	Silver	565	ug/Kg	U	113	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-23-5	Sodium	170000	ug/Kg	N	7910	28300	28300	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-28-0	Thallium	0.126	mg/kg	J	0.0691	0.23	0.23	2	MS	SKJ	01/19/10 22:32	100119-2	940132
7440-61-1	Uranium	0.798	mg/kg	*	0.0152	0.0461	0.0461	2	MS	BAJ	01/16/10 01:28	100115-3	940132
7440-62-2	Vanadium	16100	ug/Kg		113	565	565	1	P	HSC	01/27/10 12:55	012710-1	940174
7440-66-6	Zinc	35000	ug/Kg		373	1130	1130	1	P	HSC	01/27/10 12:55	012710-1	940174

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940132	940131	SW846 3050B	0.518	g	50	mL	01/12/10	AXG2
940174	940170	SW846 3050B	0.528	g	50	mL	01/12/10	AXG2
943287	943286	SW846 7471A Prep	0.544	g	30	mL	01/27/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1161-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Arsenic	49.9	ug/L	50	ug/L	99.7	90.0 - 110.0	MS	15-JAN-10 21:58	100115-3
	Beryllium	52.7	ug/L	50	ug/L	105.4	90.0 - 110.0	MS	15-JAN-10 21:58	100115-3
	Nickel	52.5	ug/L	50	ug/L	105	90.0 - 110.0	MS	15-JAN-10 21:58	100115-3
	Selenium	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	15-JAN-10 21:58	100115-3
	Uranium	52.4	ug/L	50	ug/L	104.8	90.0 - 110.0	MS	15-JAN-10 21:58	100115-3
	Thallium	48.3	ug/L	50	ug/L	96.7	90.0 - 110.0	MS	19-JAN-10 20:23	100119-2
	Aluminum	5050	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Antimony	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Barium	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Cadmium	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Calcium	4890	ug/L	5000	ug/L	97.8	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Chromium	490	ug/L	500	ug/L	98	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Cobalt	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Copper	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Iron	5010	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Lead	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Magnesium	5170	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Manganese	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Potassium	2390	ug/L	2500	ug/L	95.4	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Silver	264	ug/L	250	ug/L	105.6	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Sodium	2420	ug/L	2500	ug/L	96.9	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Vanadium	520	ug/L	500	ug/L	103.9	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Zinc	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	27-JAN-10 08:41	012710-1
	Mercury	5.1	ug/L	5	ug/L	101.9	90.0 - 110.0	AV	28-JAN-10 09:05	012810S1-4
CCV01										
	Arsenic	49	ug/L	50	ug/L	97.9	90.0 - 110.0	MS	15-JAN-10 22:29	100115-3
	Beryllium	52.7	ug/L	50	ug/L	105.5	90.0 - 110.0	MS	15-JAN-10 22:29	100115-3
	Nickel	51.1	ug/L	50	ug/L	102.2	90.0 - 110.0	MS	15-JAN-10 22:29	100115-3
	Selenium	49.8	ug/L	50	ug/L	99.6	90.0 - 110.0	MS	15-JAN-10 22:29	100115-3
	Uranium	51.9	ug/L	50	ug/L	103.8	90.0 - 110.0	MS	15-JAN-10 22:29	100115-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1161-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Thallium	48.2	ug/L	50	ug/L	96.4	90.0 – 110.0	MS	19-JAN-10 20:41	100119-2
	Aluminum	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Antimony	534	ug/L	500	ug/L	106.9	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Barium	527	ug/L	500	ug/L	105.4	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Cadmium	528	ug/L	500	ug/L	105.7	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Calcium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Chromium	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Cobalt	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Copper	530	ug/L	500	ug/L	106.1	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Iron	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Lead	529	ug/L	500	ug/L	105.9	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Magnesium	5320	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Manganese	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Potassium	5240	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Silver	528	ug/L	500	ug/L	105.5	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Sodium	10400	ug/L	10000	ug/L	103.8	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Vanadium	532	ug/L	500	ug/L	106.4	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Zinc	525	ug/L	500	ug/L	105.1	90.0 – 110.0	P	27-JAN-10 09:04	012710-1
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	28-JAN-10 09:10	012810S1-4
CCV02										
	Arsenic	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	15-JAN-10 22:47	100115-3
	Beryllium	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	15-JAN-10 22:47	100115-3
	Nickel	53	ug/L	50	ug/L	106	90.0 – 110.0	MS	15-JAN-10 22:47	100115-3
	Selenium	50.3	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	15-JAN-10 22:47	100115-3
	Uranium	54.6	ug/L	50	ug/L	109.2	90.0 – 110.0	MS	15-JAN-10 22:47	100115-3
	Thallium	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	19-JAN-10 21:03	100119-2
	Aluminum	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Antimony	541	ug/L	500	ug/L	108.2	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Barium	528	ug/L	500	ug/L	105.5	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Cadmium	528	ug/L	500	ug/L	105.5	90.0 – 110.0	P	27-JAN-10 09:20	012710-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Calcium	5310	ug/L	5000	ug/L	106.2	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Chromium	527	ug/L	500	ug/L	105.5	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Cobalt	529	ug/L	500	ug/L	105.8	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Copper	529	ug/L	500	ug/L	105.7	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Iron	5290	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Lead	535	ug/L	500	ug/L	106.9	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Magnesium	5340	ug/L	5000	ug/L	106.8	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Manganese	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Potassium	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Silver	530	ug/L	500	ug/L	106	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Sodium	10400	ug/L	10000	ug/L	104.3	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Vanadium	533	ug/L	500	ug/L	106.6	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Zinc	525	ug/L	500	ug/L	105	90.0 – 110.0	P	27–JAN–10 09:20	012710–1
	Mercury	5.01	ug/L	5	ug/L	100.2	80.0 – 120.0	AV	28–JAN–10 09:30	012810S1–4
CCV03										
	Arsenic	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	15–JAN–10 23:43	100115–3
	Beryllium	50.4	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	15–JAN–10 23:43	100115–3
	Nickel	51.7	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	15–JAN–10 23:43	100115–3
	Selenium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	15–JAN–10 23:43	100115–3
	Uranium	53.5	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	15–JAN–10 23:43	100115–3
	Thallium	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	19–JAN–10 21:25	100119–2
	Aluminum	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Antimony	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Barium	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Cadmium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Chromium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Cobalt	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Copper	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Iron	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	27–JAN–10 10:02	012710–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lead	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Manganese	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Potassium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Silver	515	ug/L	500	ug/L	103	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Sodium	10100	ug/L	10000	ug/L	101.3	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Vanadium	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Zinc	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 – 120.0	AV	28–JAN–10 09:50	012810S1–4
CCV04										
	Arsenic	49.6	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	16–JAN–10 00:38	100115–3
	Beryllium	48.1	ug/L	50	ug/L	96.2	90.0 – 110.0	MS	16–JAN–10 00:38	100115–3
	Nickel	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	16–JAN–10 00:38	100115–3
	Selenium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	16–JAN–10 00:38	100115–3
	Uranium	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	16–JAN–10 00:38	100115–3
	Thallium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	19–JAN–10 21:48	100119–2
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Antimony	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Barium	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Cadmium	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Chromium	519	ug/L	500	ug/L	103.7	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Cobalt	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Copper	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Iron	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Lead	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Magnesium	5250	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Manganese	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Silver	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	27–JAN–10 10:43	012710–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Sodium	10100	ug/L	10000	ug/L	101.1	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Vanadium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Zinc	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Mercury	5.17	ug/L	5	ug/L	103.5	80.0 – 120.0	AV	28–JAN–10 10:10	012810S1–4
CCV05										
	Arsenic	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	16–JAN–10 01:34	100115–3
	Beryllium	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	16–JAN–10 01:34	100115–3
	Nickel	52.6	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	16–JAN–10 01:34	100115–3
	Selenium	49	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	16–JAN–10 01:34	100115–3
	Uranium	52.9	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	16–JAN–10 01:34	100115–3
	Thallium	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	19–JAN–10 22:10	100119–2
	Aluminum	5170	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Antimony	523	ug/L	500	ug/L	104.6	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Barium	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Cadmium	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Chromium	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Cobalt	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Copper	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Iron	5250	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Lead	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Manganese	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Potassium	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Silver	523	ug/L	500	ug/L	104.7	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Vanadium	526	ug/L	500	ug/L	105.3	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
	Zinc	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	27–JAN–10 11:20	012710–1
CCV06										
	Thallium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	19–JAN–10 22:36	100119–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1161-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Antimony	523	ug/L	500	ug/L	104.6	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Barium	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Cadmium	515	ug/L	500	ug/L	103.1	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Calcium	5210	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Chromium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Copper	515	ug/L	500	ug/L	103	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Iron	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Lead	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Magnesium	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Manganese	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Potassium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Silver	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Sodium	10200	ug/L	10000	ug/L	101.6	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Vanadium	522	ug/L	500	ug/L	104.3	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
	Zinc	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	27-JAN-10 11:52	012710-1
CCV07										
	Aluminum	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Antimony	523	ug/L	500	ug/L	104.7	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Barium	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Cadmium	515	ug/L	500	ug/L	103	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Calcium	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Chromium	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Cobalt	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Copper	517	ug/L	500	ug/L	103.3	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Iron	5320	ug/L	5000	ug/L	106.4	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Lead	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Magnesium	5330	ug/L	5000	ug/L	106.6	90.0 – 110.0	P	27-JAN-10 12:25	012710-1
	Manganese	510	ug/L	500	ug/L	102	90.0 – 110.0	P	27-JAN-10 12:25	012710-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	27–JAN–10 12:25	012710–1
	Silver	520	ug/L	500	ug/L	104	90.0 – 110.0	P	27–JAN–10 12:25	012710–1
	Sodium	10100	ug/L	10000	ug/L	101.3	90.0 – 110.0	P	27–JAN–10 12:25	012710–1
	Vanadium	523	ug/L	500	ug/L	104.7	90.0 – 110.0	P	27–JAN–10 12:25	012710–1
	Zinc	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	27–JAN–10 12:25	012710–1
CCV08										
	Aluminum	5340	ug/L	5000	ug/L	106.9	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Antimony	540	ug/L	500	ug/L	108.1	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Barium	532	ug/L	500	ug/L	106.4	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Cadmium	528	ug/L	500	ug/L	105.6	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Calcium	5330	ug/L	5000	ug/L	106.6	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Chromium	531	ug/L	500	ug/L	106.2	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Cobalt	531	ug/L	500	ug/L	106.2	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Copper	533	ug/L	500	ug/L	106.6	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Iron	5400	ug/L	5000	ug/L	108.1	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Lead	536	ug/L	500	ug/L	107.2	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Magnesium	5400	ug/L	5000	ug/L	108.1	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Manganese	525	ug/L	500	ug/L	104.9	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Potassium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Silver	536	ug/L	500	ug/L	107.2	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Sodium	10400	ug/L	10000	ug/L	104.2	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Vanadium	538	ug/L	500	ug/L	107.6	90.0 – 110.0	P	27–JAN–10 12:58	012710–1
	Zinc	527	ug/L	500	ug/L	105.4	90.0 – 110.0	P	27–JAN–10 12:58	012710–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–1161–1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Nickel	2.2	ug/L	2	ug/L	110.2	70.0 – 130.0	MS	15–JAN–10 22:11	100115–3
	Arsenic	5.73	ug/L	5	ug/L	114.5	70.0 – 130.0	MS	15–JAN–10 22:11	100115–3
	Beryllium	.581	ug/L	.5	ug/L	116.2	70.0 – 130.0	MS	15–JAN–10 22:11	100115–3
	Selenium	5.65	ug/L	5	ug/L	112.9	70.0 – 130.0	MS	15–JAN–10 22:11	100115–3
	Uranium	.261	ug/L	.2	ug/L	130.5	70.0 – 130.0	MS	15–JAN–10 22:11	100115–3
	Thallium	1.06	ug/L	1	ug/L	106.3	70.0 – 130.0	MS	19–JAN–10 20:30	100119–2
	Mercury	.159	ug/L	.2	ug/L	79.5	70.0 – 130.0	AV	28–JAN–10 09:08	012810S1–4
PQL01										
	Aluminum	212	ug/L	200	ug/L	106.1	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Iron	132	ug/L	100	ug/L	132.2	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Lead	9.4	ug/L	10	ug/L	94	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Magnesium	361	ug/L	300	ug/L	120.2	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Manganese	10.5	ug/L	10	ug/L	105.4	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Potassium	197	ug/L	150	ug/L	131.1	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Silver	5.26	ug/L	5	ug/L	105.3	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Sodium	293	ug/L	300	ug/L	97.6	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Antimony	10.3	ug/L	10	ug/L	102.5	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Barium	4.97	ug/L	5	ug/L	99.4	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Cadmium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Chromium	5.31	ug/L	5	ug/L	106.1	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Cobalt	5.11	ug/L	5	ug/L	102.2	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Copper	11.1	ug/L	10	ug/L	110.5	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Vanadium	4.98	ug/L	5	ug/L	99.6	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Zinc	9.93	ug/L	10	ug/L	99.3	70.0 – 130.0	P	27–JAN–10 08:48	012710–1
	Calcium	205	ug/L	200	ug/L	102.7	70.0 – 130.0	P	27–JAN–10 08:48	012710–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1161-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	15-JAN-10 22:05	100115-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	15-JAN-10 22:05	100115-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	15-JAN-10 22:05	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	15-JAN-10 22:05	100115-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	15-JAN-10 22:05	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	19-JAN-10 20:26	100119-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	27-JAN-10 08:44	012710-1
	Antimony	5.66	+/-10	J	3.3	10.0	SOL	P	27-JAN-10 08:44	012710-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	27-JAN-10 08:44	012710-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	27-JAN-10 08:44	012710-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	27-JAN-10 08:44	012710-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	27-JAN-10 08:44	012710-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	27-JAN-10 08:44	012710-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	27-JAN-10 08:44	012710-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	27-JAN-10 08:44	012710-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	27-JAN-10 08:44	012710-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	27-JAN-10 08:44	012710-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	27-JAN-10 08:44	012710-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	27-JAN-10 08:44	012710-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	27-JAN-10 08:44	012710-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	27-JAN-10 08:44	012710-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	27-JAN-10 08:44	012710-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	27-JAN-10 08:44	012710-1
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	28-JAN-10 09:06	012810S1-4
CCB01										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	15-JAN-10 22:35	100115-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	15-JAN-10 22:35	100115-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	15-JAN-10 22:35	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	15-JAN-10 22:35	100115-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	15-JAN-10 22:35	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	19-JAN-10 20:44	100119-2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1161-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 09:08	012710–1
	Antimony	5.24	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 09:08	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:08	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:08	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 09:08	012710–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 09:08	012710–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 09:08	012710–1
	Copper	6.24	+/–10	J	3.0	10.0	SOL	P	27–JAN–10 09:08	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 09:08	012710–1
	Lead	2.62	+/–10	J	2.5	10.0	SOL	P	27–JAN–10 09:08	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 09:08	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 09:08	012710–1
	Potassium	82.92	+/–250	J	64.0	250	SOL	P	27–JAN–10 09:08	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:08	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 09:08	012710–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:08	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 09:08	012710–1
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 09:11	012810S1–4
CCB02										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	15–JAN–10 22:53	100115–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	15–JAN–10 22:53	100115–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	15–JAN–10 22:53	100115–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	15–JAN–10 22:53	100115–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	15–JAN–10 22:53	100115–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	19–JAN–10 21:07	100119–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 09:24	012710–1
	Antimony	4.76	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 09:24	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:24	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:24	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 09:24	012710–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 09:24	012710–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 09:24	012710–1
	Copper	3.04	+/–10	J	3.0	10.0	SOL	P	27–JAN–10 09:24	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 09:24	012710–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	27–JAN–10 09:24	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 09:24	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 09:24	012710–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	27–JAN–10 09:24	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:24	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 09:24	012710–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:24	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 09:24	012710–1
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 09:31	012810S1–4
CCB03										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	15–JAN–10 23:49	100115–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	15–JAN–10 23:49	100115–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	15–JAN–10 23:49	100115–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	15–JAN–10 23:49	100115–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	15–JAN–10 23:49	100115–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	19–JAN–10 21:29	100119–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 10:06	012710–1
	Antimony	5.31	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 10:06	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 10:06	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 10:06	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 10:06	012710–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 10:06	012710–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 10:06	012710–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	27–JAN–10 10:06	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 10:06	012710–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	27–JAN–10 10:06	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 10:06	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 10:06	012710–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1161-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	27-JAN-10 10:06	012710-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	27-JAN-10 10:06	012710-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	27-JAN-10 10:06	012710-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	27-JAN-10 10:06	012710-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	27-JAN-10 10:06	012710-1
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	28-JAN-10 09:52	012810S1-4
CCB04										
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	16-JAN-10 00:44	100115-3
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	16-JAN-10 00:44	100115-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	16-JAN-10 00:44	100115-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	16-JAN-10 00:44	100115-3
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	16-JAN-10 00:44	100115-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	19-JAN-10 21:51	100119-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	27-JAN-10 10:47	012710-1
	Antimony	4.25	+/-10	J	3.3	10.0	SOL	P	27-JAN-10 10:47	012710-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	27-JAN-10 10:47	012710-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	27-JAN-10 10:47	012710-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	27-JAN-10 10:47	012710-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	27-JAN-10 10:47	012710-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	27-JAN-10 10:47	012710-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	27-JAN-10 10:47	012710-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	27-JAN-10 10:47	012710-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	27-JAN-10 10:47	012710-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	27-JAN-10 10:47	012710-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	27-JAN-10 10:47	012710-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	27-JAN-10 10:47	012710-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	27-JAN-10 10:47	012710-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	27-JAN-10 10:47	012710-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	27-JAN-10 10:47	012710-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	27-JAN-10 10:47	012710-1
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	28-JAN-10 10:12	012810S1-4

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB05										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	16–JAN–10 01:40	100115–3
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	16–JAN–10 01:40	100115–3
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	16–JAN–10 01:40	100115–3
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	16–JAN–10 01:40	100115–3
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	16–JAN–10 01:40	100115–3
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	19–JAN–10 22:14	100119–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 11:23	012710–1
	Antimony	4.17	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 11:23	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 11:23	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 11:23	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 11:23	012710–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 11:23	012710–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 11:23	012710–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	27–JAN–10 11:23	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 11:23	012710–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	27–JAN–10 11:23	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 11:23	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 11:23	012710–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	27–JAN–10 11:23	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 11:23	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 11:23	012710–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 11:23	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 11:23	012710–1
CCB06										
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	19–JAN–10 22:40	100119–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 11:56	012710–1
	Antimony	5.41	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 11:56	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 11:56	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 11:56	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 11:56	012710–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 11:56	012710–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 11:56	012710–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	27–JAN–10 11:56	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 11:56	012710–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	27–JAN–10 11:56	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 11:56	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 11:56	012710–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	27–JAN–10 11:56	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 11:56	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 11:56	012710–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 11:56	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 11:56	012710–1
CCB07										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 12:29	012710–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 12:29	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 12:29	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 12:29	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 12:29	012710–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 12:29	012710–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 12:29	012710–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	27–JAN–10 12:29	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 12:29	012710–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	27–JAN–10 12:29	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 12:29	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 12:29	012710–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	27–JAN–10 12:29	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 12:29	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 12:29	012710–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 12:29	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 12:29	012710–1
CCB08										
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 13:02	012710–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Antimony	4.49	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 13:02	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 13:02	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 13:02	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 13:02	012710–1
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 13:02	012710–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	27–JAN–10 13:02	012710–1
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	27–JAN–10 13:02	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 13:02	012710–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	27–JAN–10 13:02	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 13:02	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 13:02	012710–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	27–JAN–10 13:02	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 13:02	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 13:02	012710–1
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 13:02	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 13:02	012710–1

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–1161–1

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202011806								
	Beryllium	0.019	mg/kg	+/–0.0949	U	MS	0.019	0.0949
	Nickel	0.0949	mg/kg	+/–0.38	U	MS	0.0949	0.38
	Selenium	0.474	mg/kg	+/–0.949	U	MS	0.474	0.949
	Thallium	0.0569	mg/kg	+/–0.19	U	MS	0.0569	0.19
	Uranium	0.0125	mg/kg	+/–0.038	U	MS	0.0125	0.038
	Arsenic	0.19	mg/kg	+/–0.949	U	MS	0.19	0.949
1202011893								
	Aluminum	6180	ug/Kg	+/–18200	U	P	6180	18200
	Antimony	573	ug/Kg	+/–909	J	P	300	909
	Barium	478	ug/Kg	+/–455		P	90.9	455
	Cadmium	90.9	ug/Kg	+/–455	U	P	90.9	455
	Calcium	7270	ug/Kg	+/–22700	U	P	7270	22700
	Chromium	136	ug/Kg	+/–455	U	P	136	455
	Cobalt	136	ug/Kg	+/–455	U	P	136	455
	Copper	273	ug/Kg	+/–909	U	P	273	909
	Iron	7560	ug/Kg	+/–22700	J	P	7270	22700
	Lead	227	ug/Kg	+/–909	U	P	227	909
	Magnesium	7730	ug/Kg	+/–27300	U	P	7730	27300
	Manganese	182	ug/Kg	+/–909	U	P	182	909
	Potassium	5820	ug/Kg	+/–22700	U	P	5820	22700
	Silver	90.9	ug/Kg	+/–455	U	P	90.9	455
	Sodium	6360	ug/Kg	+/–22700	U	P	6360	22700
	Vanadium	90.9	ug/Kg	+/–455	U	P	90.9	455
	Zinc	300	ug/Kg	+/–909	U	P	300	909
1202019704								
	Mercury	3.98	ug/kg	+/–11.7	U	AV	3.98	11.7

METALS
-4-
Interference Check Sample

SDG No: 10-1161-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	525000	ug/L	500000	ug/L	105	80.0 - 120.0	27-JAN-10 08:52	012710-1
	Antimony	13.8	ug/L					27-JAN-10 08:52	012710-1
	Barium	6.9	ug/L					27-JAN-10 08:52	012710-1
	Cadmium	2.2	ug/L					27-JAN-10 08:52	012710-1
	Calcium	502000	ug/L	500000	ug/L	100	80.0 - 120.0	27-JAN-10 08:52	012710-1
	Chromium	-0.752	ug/L					27-JAN-10 08:52	012710-1
	Cobalt	2.2	ug/L					27-JAN-10 08:52	012710-1
	Copper	4.3	ug/L					27-JAN-10 08:52	012710-1
	Iron	194000	ug/L	200000	ug/L	97.2	80.0 - 120.0	27-JAN-10 08:52	012710-1
	Lead	-9.52	ug/L					27-JAN-10 08:52	012710-1
	Magnesium	504000	ug/L	500000	ug/L	101	80.0 - 120.0	27-JAN-10 08:52	012710-1
	Manganese	-3.01	ug/L					27-JAN-10 08:52	012710-1
	Potassium	-62.8	ug/L					27-JAN-10 08:52	012710-1
	Silver	-6.45	ug/L					27-JAN-10 08:52	012710-1
	Sodium	2.65	ug/L					27-JAN-10 08:52	012710-1
	Vanadium	0.34	ug/L					27-JAN-10 08:52	012710-1
	Zinc	-0.849	ug/L					27-JAN-10 08:52	012710-1
ICSAB01									
	Aluminum	534000	ug/L	500000	ug/L	107	80.0 - 120.0	27-JAN-10 08:54	012710-1
	Antimony	546	ug/L	500	ug/L	109	80.0 - 120.0	27-JAN-10 08:54	012710-1
	Barium	526	ug/L	500	ug/L	105	80.0 - 120.0	27-JAN-10 08:54	012710-1
	Cadmium	487	ug/L	500	ug/L	97.4	80.0 - 120.0	27-JAN-10 08:54	012710-1
	Calcium	511000	ug/L	500000	ug/L	102	80.0 - 120.0	27-JAN-10 08:54	012710-1
	Chromium	509	ug/L	500	ug/L	102	80.0 - 120.0	27-JAN-10 08:54	012710-1
	Cobalt	464	ug/L	500	ug/L	92.8	80.0 - 120.0	27-JAN-10 08:54	012710-1
	Copper	572	ug/L	500	ug/L	114	80.0 - 120.0	27-JAN-10 08:54	012710-1
	Iron	199000	ug/L	200000	ug/L	99.3	80.0 - 120.0	27-JAN-10 08:54	012710-1
	Lead	501	ug/L	500	ug/L	100	80.0 - 120.0	27-JAN-10 08:54	012710-1
	Magnesium	515000	ug/L	500000	ug/L	103	80.0 - 120.0	27-JAN-10 08:54	012710-1

METALS
-4-
Interference Check Sample

SDG No: 10-1161-1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Manganese	494	ug/L	500	ug/L	98.8	80.0 – 120.0	27-JAN-10 08:54	012710-1
	Potassium	5310	ug/L	5000	ug/L	106	80.0 – 120.0	27-JAN-10 08:54	012710-1
	Silver	265	ug/L	250	ug/L	106	80.0 – 120.0	27-JAN-10 08:54	012710-1
	Sodium	5280	ug/L	5000	ug/L	106	80.0 – 120.0	27-JAN-10 08:54	012710-1
	Vanadium	537	ug/L	500	ug/L	107	80.0 – 120.0	27-JAN-10 08:54	012710-1
	Zinc	491	ug/L	500	ug/L	98.3	80.0 – 120.0	27-JAN-10 08:54	012710-1

METALS
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Interference Check Sample

SDG No: 10–1161–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Thallium	0.006	ug/L					19–JAN–10 20:33	100119–2
ICSAB01									
	Thallium	17.7	ug/L	20	ug/L	88.5	80.0 – 120.0	19–JAN–10 20:37	100119–2

METALS
-4-
Interference Check Sample

SDG No: 10-1161-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.233	ug/L					15-JAN-10 22:17	100115-3
	Beryllium	0.064	ug/L					15-JAN-10 22:17	100115-3
	Nickel	2.74	ug/L					15-JAN-10 22:17	100115-3
	Selenium	-0.605	ug/L					15-JAN-10 22:17	100115-3
	Uranium	-0.012	ug/L					15-JAN-10 22:17	100115-3
ICSAB01									
	Arsenic	20.6	ug/L	20	ug/L	103	80.0 - 120.0	15-JAN-10 22:23	100115-3
	Beryllium	19.6	ug/L	20	ug/L	98.1	80.0 - 120.0	15-JAN-10 22:23	100115-3
	Nickel	20.9	ug/L	22.7	ug/L	92.2	80.0 - 120.0	15-JAN-10 22:23	100115-3
	Selenium	19.9	ug/L	20	ug/L	99.2	80.0 - 120.0	15-JAN-10 22:23	100115-3
	Uranium	23.3	ug/L	20	ug/L	116	80.0 - 120.0	15-JAN-10 22:23	100115-3

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-1161-1 **Client ID** RE12-10-7734S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.5

Sample ID: 244227001 **Spike ID:** 1202011809

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	8.45		0.796	J	8.26	92.7		MS
Beryllium	mg/kg	75-125	5.12		0.414		5.16	91.1		MS
Nickel	mg/kg	75-125	7.22		3.06		5.16	80.6		MS
Selenium	mg/kg	75-125	1.95		0.529	U	2.07	89.2		MS
Thallium	mg/kg	75-125	9.98		0.0926	J	10.3	95.8		MS
Uranium	mg/kg	75-125	5.88		0.595		5.16	102		MS

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–1161–1 **Client ID** RE12–10–7734SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.5

Sample ID: 244227001 **Spike ID:** 1202011811

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	9.06		0.796	J	8.26	100		MS
Beryllium	mg/kg	75–125	5.19		0.414		5.16	92.5		MS
Nickel	mg/kg	75–125	9.6		3.06		5.16	127	N	MS
Selenium	mg/kg	75–125	2.08		0.529	U	2.07	95.6		MS
Thallium	mg/kg	75–125	10.3		0.0926	J	10.3	98.5		MS
Uranium	mg/kg	75–125	5.86		0.595		5.16	102		MS

METALS
–5a–

Matrix Spike Summary

SDG NO. 10–1161–1 **Client ID** RE12–10–7734S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.5

Sample ID: 244227001 **Spike ID:** 1202011896

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/Kg	75–125	53600		339	U	52500	102		P
Barium	ug/Kg	75–125	83100		20000		52500	120		P
Cadmium	ug/Kg	75–125	56900		103	U	52500	108		P
Calcium	ug/Kg	75–125	1180000		553000		525000	119		P
Chromium	ug/Kg	75–125	68100		11300		52500	108		P
Cobalt	ug/Kg	75–125	56300		736		52500	106		P
Copper	ug/Kg	75–125	61300		1730		52500	114		P
Iron	ug/Kg		10100000		8480000		525000	307	N/A	P
Lead	ug/Kg	75–125	61600		2450		52500	113		P
Magnesium	ug/Kg	75–125	1210000		412000		525000	152	N	P
Manganese	ug/Kg	75–125	343000		207000		52500	260	N	P
Potassium	ug/Kg	75–125	1150000		349000		525000	153	N	P
Silver	ug/Kg	75–125	56800		103	U	52500	108		P
Sodium	ug/Kg	75–125	758000		92400		525000	127	N	P
Vanadium	ug/Kg	75–125	62200		4690		52500	110		P
Zinc	ug/Kg	75–125	100000		38300		52500	119		P
Aluminum	ug/Kg		4530000		2280000		525000	430	N/A	P

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–1161–1 **Client ID** RE12–10–7734SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.5

Sample ID: 244227001 **Spike ID:** 1202011898

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		4320000		2280000		513000	398	N/A	P
Antimony	ug/Kg	75–125	49800		339	U	51300	96.9		P
Barium	ug/Kg	75–125	76500		20000		51300	110		P
Cadmium	ug/Kg	75–125	54700		103	U	51300	106		P
Calcium	ug/Kg	75–125	1120000		553000		513000	110		P
Chromium	ug/Kg	75–125	66200		11300		51300	107		P
Cobalt	ug/Kg	75–125	54000		736		51300	104		P
Copper	ug/Kg	75–125	57900		1730		51300	109		P
Iron	ug/Kg		9540000		8480000		513000	206	N/A	P
Lead	ug/Kg	75–125	58400		2450		51300	109		P
Magnesium	ug/Kg	75–125	1110000		412000		513000	135	N	P
Manganese	ug/Kg		274000		207000		51300	131	N/A	P
Potassium	ug/Kg	75–125	1040000		349000		513000	136	N	P
Silver	ug/Kg	75–125	54100		103	U	51300	105		P
Sodium	ug/Kg	75–125	693000		92400		513000	117		P
Vanadium	ug/Kg	75–125	58600		4690		51300	105		P
Zinc	ug/Kg	75–125	95500		38300		51300	111		P

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–1161–1 **Client ID** RE12–10–7734S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.5

Sample ID: 244227001 **Spike ID:** 1202019707

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	132		4.31	U	125	104		AV

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–1161–1 **Client ID** RE12–10–7734SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 93.5

Sample ID: 244227001 **Spike ID:** 1202019709

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75–125	124		4.31	U	118	104		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7734D

Sample ID: 244227001 **Duplicate ID:** 1202011808 **Percent Solids for Dup:** 93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.06	0.796	J	0.617	J	25.4		MS
Beryllium	mg/kg	+/–.106	0.414		0.341		19.3		MS
Nickel	mg/kg	+/–20%	3.06		2.26		30.2	*	MS
Selenium	mg/kg		0.529	U	0.528	U			MS
Thallium	mg/kg		0.0926	J	0.0633	U	200		MS
Uranium	mg/kg	+/–20%	0.595		0.374		45.5	*	MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1161-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12-10-7734SD

Sample ID: 1202011809 **Duplicate ID:** 1202011811 **Percent Solids for Dup:** 93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	8.45		9.06		6.91		MS
Beryllium	mg/kg	+/-20	5.12		5.19		1.39		MS
Nickel	mg/kg	+/-20	7.22		9.6		28.4	*	MS
Selenium	mg/kg	+/-20	1.95		2.08		6.48		MS
Thallium	mg/kg	+/-20	9.98		10.3		2.75		MS
Uranium	mg/kg	+/-20	5.88		5.86		.222		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7734D

Sample ID: 244227001 **Duplicate ID:** 1202011895 **Percent Solids for Dup:** 93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	2280000		2370000		3.85		P
Antimony	ug/Kg		339	U	335	U			P
Barium	ug/Kg	+/–20%	20000		18900		5.79		P
Cadmium	ug/Kg		103	U	102	U			P
Calcium	ug/Kg	+/–20%	553000		542000		2.06		P
Chromium	ug/Kg	+/–20%	11300		13600		18.3		P
Cobalt	ug/Kg	+/–508	736		690		6.55		P
Copper	ug/Kg	+/–1020	1730		1670		3.58		P
Iron	ug/Kg	+/–20%	8480000		8260000		2.61		P
Lead	ug/Kg	+/–1020	2450		2510		2.19		P
Magnesium	ug/Kg	+/–20%	412000		436000		5.78		P
Manganese	ug/Kg	+/–20%	207000		191000		8.16		P
Potassium	ug/Kg	+/–20%	349000		353000		1.36		P
Silver	ug/Kg		103	U	102	U			P
Sodium	ug/Kg	+/–25400	92400		82700		11		P
Vanadium	ug/Kg	+/–20%	4690		4340		7.74		P
Zinc	ug/Kg	+/–20%	38300		37000		3.32		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7734SD

Sample ID: 1202011896 **Duplicate ID:** 1202011898 **Percent Solids for Dup:** 93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	4530000		4320000		4.76		P
Antimony	ug/Kg	+/–20	53600		49800		7.44		P
Barium	ug/Kg	+/–20	83100		76500		8.3		P
Cadmium	ug/Kg	+/–20	56900		54700		3.95		P
Calcium	ug/Kg	+/–20	1180000		1120000		5.05		P
Chromium	ug/Kg	+/–20	68100		66200		2.81		P
Cobalt	ug/Kg	+/–20	56300		54000		4.34		P
Copper	ug/Kg	+/–20	61300		57900		5.72		P
Iron	ug/Kg	+/–20	10100000		9540000		5.6		P
Lead	ug/Kg	+/–20	61600		58400		5.47		P
Magnesium	ug/Kg	+/–20	1210000		1110000		8.87		P
Manganese	ug/Kg	+/–20	343000		274000		22.3	*	P
Potassium	ug/Kg	+/–20	1150000		1040000		9.63		P
Silver	ug/Kg	+/–20	56800		54100		4.72		P
Sodium	ug/Kg	+/–20	758000		693000		8.97		P
Vanadium	ug/Kg	+/–20	62200		58600		5.96		P
Zinc	ug/Kg	+/–20	100000		95500		5.02		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1161-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12-10-7734D

Sample ID: 244227001 **Duplicate ID:** 1202019706 **Percent Solids for Dup:** 93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg		4.31	U	4.36	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE12–10–7734SD

Sample ID: 1202019707 **Duplicate ID:** 1202019709 **Percent Solids for Dup:** 93.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	132		124		6.1		AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1161-1

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202011807								
	Selenium	mg/kg	286	288		101	80.2-125.9	MS
	Thallium	mg/kg	121	129		106	78-123.2	MS
	Uranium	mg/kg	2.13	2.07		97.4	61.9-130.7	MS
	Arsenic	mg/kg	104	105		101	83-120	MS
	Beryllium	mg/kg	77.6	78.6		101	81.2-126.8	MS
	Nickel	mg/kg	134	134		100	83.3-121.4	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1161-1

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202011894								
	Aluminum	ug/Kg	10500000	10100000		95.9	56-144	P
	Antimony	ug/Kg	173000	127000		73.6	71-130	P
	Barium	ug/Kg	198000	211000		107	80-120	P
	Cadmium	ug/Kg	60700	63300		104	81-120	P
	Calcium	ug/Kg	9870000	10600000		107	83-117	P
	Chromium	ug/Kg	236000	252000		107	80-120	P
	Cobalt	ug/Kg	91200	97900		107	81-120	P
	Copper	ug/Kg	174000	196000		112	81-118	P
	Iron	ug/Kg	18000000	21800000		121	51-149	P
	Lead	ug/Kg	86000	93400		109	79-121	P
	Magnesium	ug/Kg	4000000	4240000		106	79-122	P
	Manganese	ug/Kg	558000	584000		105	81-119	P
	Potassium	ug/Kg	4300000	4450000		104	74-127	P
	Silver	ug/Kg	30100	32900		109	66-134	P
	Sodium	ug/Kg	1020000	1060000		104	74-127	P
	Vanadium	ug/Kg	115000	136000		118	79-121	P
	Zinc	ug/Kg	594000	620000		104	80-121	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1161-1

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202019705								
	Mercury	ug/kg	5150	5400		105	71.6--128.3	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1161-1 **Client ID** RE12-10-7734L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 244227001 **Serial Dilution ID:** 1202011810

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	3.77	J	5	U	100			MS
Beryllium	1.96		1.99	J	1.53			MS
Nickel	14.5		15.2		4.83			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.438	J	1.53	J	249			MS
Uranium	2.81		2.8		.534			MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 10–1161–1 **Client ID** RE12–10–7734L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 244227001 **Serial Dilution ID:** 1202011897

Analyte	Initial Value µg/L	C	Serial Value µg/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	22200		21800		2.03		10	P
Antimony	3.3	U	16.5	U				P
Barium	195		181		7.44		10	P
Cadmium	1	U	5	U				P
Calcium	5380		5050		6.13		10	P
Chromium	110		107		3.18		10	P
Cobalt	7.17		7.5	U	100			P
Copper	16.8		15.3	J	9.23			P
Iron	82600		82000		.726		10	P
Lead	23.9		30.7	J	28.2			P
Magnesium	4010		3990		.499			P
Manganese	2020		1940		4.21		10	P
Potassium	3400		3400		0		10	P
Silver	1	U	5	U				P
Sodium	899		585	J	34.9			P
Vanadium	45.7		45.6		.328			P
Zinc	373		336		9.92		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1161-1 **Client ID** RE12-10-7734L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 244227001 **Serial Dilution ID:** 1202019708

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.068	U	.34	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1161-1 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	940170						
1202011893	MB for batch 940170	MB	S	12-JAN-10	.55g	50mL	
1202011894	LCS for batch 940170	LCS	S	12-JAN-10	.505g	50mL	
1202011896	RE12-10-7734S	MS	S	12-JAN-10	.51g	50mL	
1202011898	RE12-10-7734SD	MSD	S	12-JAN-10	.521g	50mL	
1202011895	RE12-10-7734D	DUP	S	12-JAN-10	.527g	50mL	
244227001	RE12-10-7734	SAMPLE	S	12-JAN-10	.521g	50mL	
244227002	RE12-10-7701	SAMPLE	S	12-JAN-10	.523g	50mL	
244227003	RE12-10-7702	SAMPLE	S	12-JAN-10	.543g	50mL	
244227004	RE12-10-7700	SAMPLE	S	12-JAN-10	.517g	50mL	
244227005	RE12-10-7699	SAMPLE	S	12-JAN-10	.523g	50mL	
244227006	RE12-10-7727	SAMPLE	S	12-JAN-10	.511g	50mL	
244227007	RE12-10-7710	SAMPLE	S	12-JAN-10	.515g	50mL	
244227008	RE12-10-7715	SAMPLE	S	12-JAN-10	.513g	50mL	
244227009	RE12-10-7707	SAMPLE	S	12-JAN-10	.506g	50mL	
244227010	RE12-10-7719	SAMPLE	S	12-JAN-10	.505g	50mL	
244227011	RE12-10-7717	SAMPLE	S	12-JAN-10	.502g	50mL	
244227012	RE12-10-7708	SAMPLE	S	12-JAN-10	.522g	50mL	
244227013	RE12-10-7706	SAMPLE	S	12-JAN-10	.524g	50mL	
244227014	RE12-10-7714	SAMPLE	S	12-JAN-10	.52g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1161-1 **Method Type:** P

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
244227015	RE12-10-7705	SAMPLE	S	12-JAN-10	.528g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1161-1 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	940131						
1202011806	MB for batch 940131	MB	S	12-JAN-10	.527g	50mL	
1202011807	LCS for batch 940131	LCS	S	12-JAN-10	.51g	50mL	
1202011809	RE12-10-7734S	MS	S	12-JAN-10	.518g	50mL	
1202011811	RE12-10-7734SD	MSD	S	12-JAN-10	.518g	50mL	
1202011808	RE12-10-7734D	DUP	S	12-JAN-10	.507g	50mL	
244227001	RE12-10-7734	SAMPLE	S	12-JAN-10	.506g	50mL	
244227002	RE12-10-7701	SAMPLE	S	12-JAN-10	.522g	50mL	
244227003	RE12-10-7702	SAMPLE	S	12-JAN-10	.507g	50mL	
244227004	RE12-10-7700	SAMPLE	S	12-JAN-10	.545g	50mL	
244227005	RE12-10-7699	SAMPLE	S	12-JAN-10	.514g	50mL	
244227006	RE12-10-7727	SAMPLE	S	12-JAN-10	.512g	50mL	
244227007	RE12-10-7710	SAMPLE	S	12-JAN-10	.523g	50mL	
244227008	RE12-10-7715	SAMPLE	S	12-JAN-10	.523g	50mL	
244227009	RE12-10-7707	SAMPLE	S	12-JAN-10	.509g	50mL	
244227010	RE12-10-7719	SAMPLE	S	12-JAN-10	.535g	50mL	
244227011	RE12-10-7717	SAMPLE	S	12-JAN-10	.508g	50mL	
244227012	RE12-10-7708	SAMPLE	S	12-JAN-10	.501g	50mL	
244227013	RE12-10-7706	SAMPLE	S	12-JAN-10	.507g	50mL	
244227014	RE12-10-7714	SAMPLE	S	12-JAN-10	.519g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1161-1 **Method Type:** MS

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
244227015	RE12-10-7705	SAMPLE	S	12-JAN-10	.518g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1161-1 **Method Type:** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	943286						
1202019704	MB for batch 943286	MB	S	27-JAN-10	.513g	30mL	
1202019705	LCS for batch 943286	LCS	S	27-JAN-10	.206g	30mL	
1202019707	RE12-10-7734S	MS	S	27-JAN-10	.514g	30mL	
1202019709	RE12-10-7734SD	MSD	S	27-JAN-10	.544g	30mL	
1202019706	RE12-10-7734D	DUP	S	27-JAN-10	.501g	30mL	
244227001	RE12-10-7734	SAMPLE	S	27-JAN-10	.506g	30mL	
244227002	RE12-10-7701	SAMPLE	S	27-JAN-10	.515g	30mL	
244227003	RE12-10-7702	SAMPLE	S	27-JAN-10	.567g	30mL	
244227004	RE12-10-7700	SAMPLE	S	27-JAN-10	.528g	30mL	
244227005	RE12-10-7699	SAMPLE	S	27-JAN-10	.574g	30mL	
244227006	RE12-10-7727	SAMPLE	S	27-JAN-10	.506g	30mL	
244227007	RE12-10-7710	SAMPLE	S	27-JAN-10	.565g	30mL	
244227008	RE12-10-7715	SAMPLE	S	27-JAN-10	.526g	30mL	
244227009	RE12-10-7707	SAMPLE	S	27-JAN-10	.543g	30mL	
244227010	RE12-10-7719	SAMPLE	S	27-JAN-10	.55g	30mL	
244227011	RE12-10-7717	SAMPLE	S	27-JAN-10	.589g	30mL	
244227012	RE12-10-7708	SAMPLE	S	27-JAN-10	.527g	30mL	
244227013	RE12-10-7706	SAMPLE	S	27-JAN-10	.514g	30mL	
244227014	RE12-10-7714	SAMPLE	S	27-JAN-10	.523g	30mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-1161-1 **Method Type:** AV

Contract: **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
244227015	RE12-10-7705	SAMPLE	S	27-JAN-10	.544g	30mL	

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 15-JAN-10 **End Date:** 16-JAN-10

Client Sdg: 10-1161-1
Method MS
Data File: 100115-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	21:40			X		X											X		X				X		
S10	1	21:46			X		X											X		X				X		
S100	1	21:52			X		X											X		X				X		
ICV01	1	21:58			X		X											X		X				X		
ICB01	1	22:05			X		X											X		X				X		
CRDL01	1	22:11			X		X											X		X				X		
ICSA01	1	22:17			X		X											X		X				X		
ICSAB01	1	22:23			X		X											X		X				X		
CCV01	1	22:29			X		X											X		X				X		
CCB01	1	22:35			X		X											X		X				X		
LR01	1	22:41			X		X											X		X				X		
CCV02	1	22:47			X		X											X		X				X		
CCB02	1	22:53			X		X											X		X				X		
1202011806	2	23:00			X		X											X		X				X		
1202011807	40	23:06			X		X											X		X				X		
244227001	2	23:12			X		X											X		X				X		
1202011808	2	23:18			X		X											X		X				X		
1202011809	2	23:24			X		X											X		X				X		
1202011811	2	23:30			X		X											X		X				X		
1202011810	10	23:37			X		X											X		X				X		
CCV03	1	23:43			X		X											X		X				X		
CCB03	1	23:49			X		X											X		X				X		
244227002	2	23:55			X		X											X		X				X		
244227003	2	00:01			X		X											X		X				X		
244227004	2	00:08			X		X											X		X				X		
244227005	2	00:14			X		X											X		X				X		
244227006	2	00:20			X		X											X		X				X		
244227007	2	00:26			X		X											X		X				X		
244227008	2	00:32			X		X											X		X				X		
CCV04	1	00:38			X		X											X		X				X		
CCB04	1	00:44			X		X											X		X				X		
244227009	2	00:51			X		X											X		X				X		
244227010	2	00:57			X		X											X		X				X		
244227011	2	01:03			X		X											X		X				X		
244227012	2	01:09			X		X											X		X				X		
244227013	2	01:15			X		X											X		X				X		
244227014	2	01:22			X		X											X		X				X		
244227015	2	01:28			X		X											X		X				X		
CCV05	1	01:34			X		X											X		X				X		
CCB05	1	01:40			X		X											X		X				X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 28–JAN–10 **End Date:** 28–JAN–10

Client Sdg: 10–1161–1
Method AV
Data File: 012810S1–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	08:55															X									
S0.2	1	08:56															X									
S0.5	1	08:58															X									
S2.0	1	09:00															X									
S5.0	1	09:01															X									
S10.0	1	09:03															X									
ICV01	1	09:05															X									
ICB01	1	09:06															X									
CRDL01	1	09:08															X									
CCV01	1	09:10															X									
CCB01	1	09:11															X									
1202019704	1	09:13															X									
1202019705	10	09:15															X									
244227001	1	09:17															X									
1202019706	1	09:18															X									
1202019707	1	09:20															X									
1202019709	1	09:21															X									
1202019708	5	09:23															X									
244227002	1	09:25															X									
244227003	1	09:26															X									
244227004	1	09:28															X									
CCV02	1	09:30															X									
CCB02	1	09:31															X									
244227005	1	09:33															X									
244227006	1	09:35															X									
244227007	1	09:36															X									
244227008	1	09:38															X									
244227009	1	09:40															X									
244227010	1	09:42															X									
244227011	1	09:43															X									
244227012	1	09:45															X									
244227013	1	09:47															X									
244227014	1	09:48															X									
CCV03	1	09:50															X									
CCB03	1	09:52															X									
244227015	1	09:53															X									
ZZZZZZ	1	09:55																								
ZZZZZZ	10	09:57																								
ZZZZZZ	1	09:58																								
ZZZZZZ	1	10:00																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	10:02																							
ZZZZZZ	1	10:03																							
ZZZZZZ	1	10:05																							
ZZZZZZ	1	10:07																							
ZZZZZZ	1	10:08																							
CCV04	1	10:10													X										
CCB04	1	10:12													X										

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 19–JAN–10 **End Date:** 19–JAN–10

Client Sdg: 10–1161–1
Method MS
Data File: 100119–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	20:12																					X			
S10	1	20:15																					X			
S100	1	20:19																					X			
ICV01	1	20:23																					X			
ICB01	1	20:26																					X			
CRDL01	1	20:30																					X			
ICSA01	1	20:33																					X			
ICSAB01	1	20:37																					X			
CCV01	1	20:41																					X			
CCB01	1	20:44																					X			
1202011806	2	20:48																					X			
1202011807	40	20:52																					X			
244227001	2	20:56																					X			
1202011808	2	20:59																					X			
CCV02	1	21:03																					X			
CCB02	1	21:07																					X			
1202011809	2	21:10																					X			
1202011811	2	21:14																					X			
1202011810	10	21:18																					X			
244227002	2	21:22																					X			
CCV03	1	21:25																					X			
CCB03	1	21:29																					X			
244227003	2	21:33																					X			
244227004	2	21:36																					X			
244227005	2	21:40																					X			
244227006	2	21:44																					X			
CCV04	1	21:48																					X			
CCB04	1	21:51																					X			
244227007	2	21:55																					X			
244227008	2	21:59																					X			
244227009	2	22:03																					X			
244227010	2	22:06																					X			
CCV05	1	22:10																					X			
CCB05	1	22:14																					X			
244227011	2	22:17																					X			
244227012	2	22:21																					X			
244227013	2	22:25																					X			
244227014	2	22:29																					X			
244227015	2	22:32																					X			
CCV06	1	22:36																					X			

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
CCB06	1	22:40																			X			

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 27–JAN–10 **End Date:** 27–JAN–10

Client Sdg: 10–1161–1
Method P
Data File: 012710–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	08:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	08:29		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	08:31	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	08:35	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	08:38	X						X				X		X							X				
ICV01	1	08:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	08:44	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	08:48	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	08:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	08:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	08:57	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	09:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV01	1	09:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	09:08	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	09:16	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	09:20	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	09:24	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	09:30																								
ZZZZZZ	1	09:34																								
ZZZZZZ	1	09:37																								
ZZZZZZ	1	09:40																								
ZZZZZZ	1	09:44																								
ZZZZZZ	1	09:48																								
ZZZZZZ	5	09:51																								
ZZZZZZ	1	09:55																								
ZZZZZZ	1	09:59																								
CCV03	1	10:02	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	10:06	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	10:10																								
ZZZZZZ	1	10:13																								
ZZZZZZ	1	10:17																								
ZZZZZZ	1	10:21																								
ZZZZZZ	1	10:25																								
ZZZZZZ	1	10:28																								
ZZZZZZ	1	10:32																								
ZZZZZZ	1	10:36																								
ZZZZZZ	1	10:39																								
CCV04	1	10:43	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	10:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	10:50																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
ZZZZZZ	1	10:54																							
ZZZZZZ	1	10:58																							
ZZZZZZ	1	11:01																							
ZZZZZZ	1	11:05																							
ZZZZZZ	1	11:09																							
ZZZZZZ	1	11:12																							
ZZZZZZ	1	11:16																							
CCV05	1	11:20	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB05	1	11:23	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202011893	1	11:27	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202011894	1	11:31	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227001	1	11:34	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202011895	1	11:37	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202011896	1	11:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202011898	1	11:45	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202011897	5	11:48	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV06	1	11:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB06	1	11:56	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227002	1	11:59	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227003	1	12:03	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227004	1	12:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227005	1	12:10	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227006	1	12:14	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227007	1	12:18	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227008	1	12:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV07	1	12:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB07	1	12:29	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227009	1	12:32	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227010	1	12:36	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227011	1	12:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227012	1	12:44	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227013	1	12:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227014	1	12:51	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
244227015	1	12:55	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV08	1	12:58	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB08	1	13:02	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–1161–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1161-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
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Instrument Detection Limits

SDG NO. 10–1161–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.05500	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.28800	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.04600	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	11.3250	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	-1.59900	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-21.2250	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.68400
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	1.19100	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	105.59
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	3.36300	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	-2.30400	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.61100

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	20.5430
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-16.3320
Arsenic	188.979	-0.05800	0.00000	0.00000	0.00000	1.97700
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.13300	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-0.90500
Copper	324.752	-0.13900	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.03800	-2.87600	0.00000	0.00000	0.00000
Magnesium	279.077	1.07300	0.00000	0.00000	0.00000	-16.8110
Manganese	257.61	-0.13900	0.00000	0.04000	0.00000	0.00000
Molybdenum	202.031	-0.03800	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	-0.01300	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.81200	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.88200	0.00000	0.28200	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.06300	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.03900	0.00000	0.00000	-4.11700	0.00000
Tin	189.927	-0.09200	0.00000	-0.19600	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.07900	0.00000	0.00000
Uranium	409.014	0.13900	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.05300	0.00000	0.00000	0.00000	-7.71400
Zinc	213.857	0.14460	0.00000	0.02030	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-1161-1
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.99900	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	4.41600	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.38100	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08700	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.04000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-14.8110	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-8.68900	-1.22400
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.03900
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-1
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-1.80500	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-0.63000	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.59800	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 10–1161–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Aluminum	1	50000	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–1161–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Sodium	1	50000	ug/L	01–NOV–09
Thallium	1000	500	ug/L	01–NOV–09
Uranium	1000	5000	ug/L	01–NOV–09
Vanadium	1000	100	ug/L	01–NOV–09
Zinc	1000	2500	ug/L	01–NOV–09
Aluminum	1	50000	ug/L	01–NOV–09
Antimony	1000	250	ug/L	01–NOV–09
Arsenic	1000	1000	ug/L	01–NOV–09
Barium	1000	1000	ug/L	01–NOV–09
Beryllium	1000	1000	ug/L	01–NOV–09
Cadmium	1000	1000	ug/L	01–NOV–09
Calcium	500	50000	ug/L	01–NOV–09
Chromium	1000	1000	ug/L	01–NOV–09
Cobalt	1000	1000	ug/L	01–NOV–09
Copper	1000	1000	ug/L	01–NOV–09
Iron	500	50000	ug/L	01–NOV–09
Lead	1000	5000	ug/L	01–NOV–09
Magnesium	1	50000	ug/L	01–NOV–09
Manganese	1000	1000	ug/L	01–NOV–09
Nickel	1000	1000	ug/L	01–NOV–09
Potassium	1	50000	ug/L	01–NOV–09
Selenium	1000	500	ug/L	01–NOV–09
Silver	1000	250	ug/L	01–NOV–09

METALS
–12–
Linear Ranges

SDG NO. 10–1161–1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

Raw Data

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Analysis Begun

Start Time: 1/27/2010 08:25:13 **Plasma On Time: 1/25/2010 05:31:26**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\012710.sif
Batch ID:
Results Data Set: 012710
Results Library: c:\pe\optima1\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 1/27/2010 08:25:14**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	77232.1	77232.1	0.000	%	08:25:59
1	Al 396.153Radial†	-32.1	-31.9	[0.00]	µg/L	08:25:59
1	Ca 317.933Radial†	251.4	250.0	[0.00]	µg/L	08:26:19
1	Fe 238.204 Radial†	13.5	13.4	[0.00]	µg/L	08:26:19
1	K 766.490 Radial†	412.4	410.2	[0.00]	µg/L	08:25:59
1	Mg 279.077 IEC†	8.5	8.5	[0.00]	µg/L	08:26:19
1	Na 589.592 Radial†	575.3	572.2	[0.00]	µg/L	08:25:59
1	Sr 421.552†	552.9	550.0	[0.00]	µg/L	08:25:59
1	Sc 361.383	1948536.9	1948536.9	0.0000	%	08:27:22
1	Y 371.029	1231872.8	1231872.8	0.0000	%	08:27:22
1	Ag 328.068†	-43.6	-43.5	[0.00]	µg/L	08:27:27
1	As 188.979†	0.7	0.7	[0.00]	µg/L	08:27:48
1	B 249.677†	122.7	122.3	[0.00]	µg/L	08:27:48
1	Ba 233.527†	-13.2	-13.2	[0.00]	µg/L	08:27:48
1	Be 313.107†	3810.4	3800.4	[0.00]	µg/L	08:27:27
1	Cd 226.502†	-138.1	-137.7	[0.00]	µg/L	08:27:48
1	Co 228.616†	-38.2	-38.1	[0.00]	µg/L	08:27:48
1	Cr 267.716†	-76.3	-76.1	[0.00]	µg/L	08:27:27
1	Cu 324.752†	3651.3	3641.7	[0.00]	µg/L	08:27:27
1	Mn 257.610†	-188.8	-188.3	[0.00]	µg/L	08:27:48
1	Mo 202.031†	14.3	14.3	[0.00]	µg/L	08:27:48
1	Ni 231.604†	333.6	332.7	[0.00]	µg/L	08:27:48
1	P 214.914†	206.9	206.3	[0.00]	µg/L	08:27:48
1	Pb 220.353†	55.7	55.5	[0.00]	µg/L	08:27:48
1	S 181.975 Axial†	24.1	24.0	[0.00]	µg/L	08:27:48
1	Sb 206.836†	25.0	24.9	[0.00]	µg/L	08:27:48
1	Se 196.026†	10.1	10.0	[0.00]	µg/L	08:27:48
1	SiO2†	2259.5	2253.5	[0.00]	µg/L	08:27:27
1	Si 251.611†	299.5	298.7	[0.00]	µg/L	08:27:48
1	Sn 189.927†	19.5	19.4	[0.00]	µg/L	08:27:48
1	Ti 334.940†	789.1	787.0	[0.00]	µg/L	08:27:27
1	Tl 190.801†	-23.6	-23.5	[0.00]	µg/L	08:27:48
1	U 409.014†	-136.1	-135.8	[0.00]	µg/L	08:27:27
1	V 292.402†	-142.0	-141.6	[0.00]	µg/L	08:27:27
1	Zn 213.857†	669.9	668.1	[0.00]	µg/L	08:27:48
2	Sc RADIAL	76797.7	76797.7	0.000	%	08:26:25
2	Al 396.153Radial†	-27.5	-27.5	[0.00]	µg/L	08:26:25
2	Ca 317.933Radial†	248.5	248.6	[0.00]	µg/L	08:26:45
2	Fe 238.204 Radial†	16.8	16.8	[0.00]	µg/L	08:26:45
2	K 766.490 Radial†	435.8	435.9	[0.00]	µg/L	08:26:25
2	Mg 279.077 IEC†	7.1	7.1	[0.00]	µg/L	08:26:45
2	Na 589.592 Radial†	528.0	528.1	[0.00]	µg/L	08:26:25
2	Sr 421.552†	560.8	561.0	[0.00]	µg/L	08:26:25
2	Sc 361.383	1941419.5	1941419.5	0.0000	%	08:27:54
2	Y 371.029	1227667.8	1227667.8	0.0000	%	08:27:54
2	Ag 328.068†	-56.2	-56.2	[0.00]	µg/L	08:27:59
2	As 188.979†	0.0	0.0	[0.00]	µg/L	08:28:20

2	B 249.677†	113.1	113.2	[0.00] µg/L	08:28:20
2	Ba 233.527†	-17.8	-17.8	[0.00] µg/L	08:28:20
2	Be 313.107†	3869.2	3873.1	[0.00] µg/L	08:27:59
2	Cd 226.502†	-133.9	-134.0	[0.00] µg/L	08:28:20
2	Co 228.616†	-53.9	-54.0	[0.00] µg/L	08:28:20
2	Cr 267.716†	-104.0	-104.1	[0.00] µg/L	08:27:59
2	Cu 324.752†	3694.4	3698.1	[0.00] µg/L	08:27:59
2	Mn 257.610†	-185.6	-185.8	[0.00] µg/L	08:28:20
2	Mo 202.031†	17.3	17.3	[0.00] µg/L	08:28:20
2	Ni 231.604†	332.9	333.2	[0.00] µg/L	08:28:20
2	P 214.914†	201.8	202.0	[0.00] µg/L	08:28:20
2	Pb 220.353†	62.3	62.4	[0.00] µg/L	08:28:20
2	S 181.975 Axial†	23.6	23.7	[0.00] µg/L	08:28:20
2	Sb 206.836†	21.6	21.6	[0.00] µg/L	08:28:20
2	Se 196.026†	15.5	15.5	[0.00] µg/L	08:28:20
2	SiO2†	2290.6	2292.9	[0.00] µg/L	08:27:59
2	Si 251.611†	310.5	310.8	[0.00] µg/L	08:28:20
2	Sn 189.927†	27.2	27.2	[0.00] µg/L	08:28:20
2	Ti 334.940†	796.3	797.1	[0.00] µg/L	08:27:59
2	Tl 190.801†	-22.7	-22.7	[0.00] µg/L	08:28:20
2	U 409.014†	-232.0	-232.2	[0.00] µg/L	08:27:59
2	V 292.402†	-97.1	-97.2	[0.00] µg/L	08:27:59
2	Zn 213.857†	667.1	667.8	[0.00] µg/L	08:28:20
3	Sc RADIAL	76429.2	76429.2	0.000 %	08:26:51
3	Al 396.153Radial†	-24.3	-24.5	[0.00] µg/L	08:26:51
3	Ca 317.933Radial†	255.1	256.4	[0.00] µg/L	08:27:11
3	Fe 238.204 Radial†	17.3	17.4	[0.00] µg/L	08:27:11
3	K 766.490 Radial†	387.9	389.9	[0.00] µg/L	08:26:51
3	Mg 279.077 IEC†	9.3	9.3	[0.00] µg/L	08:27:11
3	Na 589.592 Radial†	531.8	534.5	[0.00] µg/L	08:26:51
3	Sr 421.552†	559.3	562.1	[0.00] µg/L	08:26:51
3	Sc 361.383	1940224.9	1940224.9	0.0000 %	08:28:26
3	Y 371.029	1226856.6	1226856.6	0.0000 %	08:28:26
3	Ag 328.068†	-65.4	-65.5	[0.00] µg/L	08:28:31
3	As 188.979†	0.9	0.9	[0.00] µg/L	08:28:52
3	B 249.677†	109.9	110.0	[0.00] µg/L	08:28:52
3	Ba 233.527†	-12.5	-12.6	[0.00] µg/L	08:28:52
3	Be 313.107†	3838.5	3844.8	[0.00] µg/L	08:28:31
3	Cd 226.502†	-134.5	-134.7	[0.00] µg/L	08:28:52
3	Co 228.616†	-42.8	-42.9	[0.00] µg/L	08:28:52
3	Cr 267.716†	-68.0	-68.2	[0.00] µg/L	08:28:31
3	Cu 324.752†	3658.8	3664.8	[0.00] µg/L	08:28:31
3	Mn 257.610†	-194.1	-194.4	[0.00] µg/L	08:28:52
3	Mo 202.031†	20.0	20.0	[0.00] µg/L	08:28:52
3	Ni 231.604†	339.8	340.3	[0.00] µg/L	08:28:52
3	P 214.914†	198.8	199.1	[0.00] µg/L	08:28:52
3	Pb 220.353†	49.8	49.9	[0.00] µg/L	08:28:52
3	S 181.975 Axial†	28.8	28.9	[0.00] µg/L	08:28:52
3	Sb 206.836†	20.6	20.6	[0.00] µg/L	08:28:52
3	Se 196.026†	11.7	11.7	[0.00] µg/L	08:28:52
3	SiO2†	2286.1	2289.9	[0.00] µg/L	08:28:31
3	Si 251.611†	303.5	304.0	[0.00] µg/L	08:28:52
3	Sn 189.927†	23.6	23.6	[0.00] µg/L	08:28:52
3	Ti 334.940†	735.7	736.9	[0.00] µg/L	08:28:31
3	Tl 190.801†	-23.0	-23.0	[0.00] µg/L	08:28:52
3	U 409.014†	-330.4	-330.9	[0.00] µg/L	08:28:31
3	V 292.402†	-127.4	-127.6	[0.00] µg/L	08:28:31
3	Zn 213.857†	677.0	678.1	[0.00] µg/L	08:28:52

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1943393.8	4493.97	0.23%	0.0000	%
Sc RADIAL	76819.7	401.92	0.52%	0.000	%
Y 371.029	1228799.0	2692.65	0.22%	0.0000	%
Ag 328.068†	-55.1	11.07	20.10%	[0.00]	µg/L
Al 396.153Radial†	-28.0	3.74	13.40%	[0.00]	µg/L
As 188.979†	0.6	0.45	80.85%	[0.00]	µg/L
B 249.677†	115.2	6.39	5.55%	[0.00]	µg/L
Ba 233.527†	-14.5	2.85	19.63%	[0.00]	µg/L

Be 313.107†	3839.4	36.65	0.95%	[0.00]	µg/L
Ca 317.933Radial†	251.7	4.15	1.65%	[0.00]	µg/L
Cd 226.502†	-135.5	1.97	1.46%	[0.00]	µg/L
Co 228.616†	-45.0	8.12	18.05%	[0.00]	µg/L
Cr 267.716†	-82.8	18.89	22.82%	[0.00]	µg/L
Cu 324.752†	3668.2	28.38	0.77%	[0.00]	µg/L
Fe 238.204 Radial†	15.9	2.13	13.42%	[0.00]	µg/L
K 766.490 Radial†	412.0	23.06	5.60%	[0.00]	µg/L
Mg 279.077 IEC†	8.3	1.11	13.39%	[0.00]	µg/L
Mn 257.610†	-189.5	4.42	2.33%	[0.00]	µg/L
Mo 202.031†	17.2	2.86	16.62%	[0.00]	µg/L
Na 589.592 Radial†	544.9	23.82	4.37%	[0.00]	µg/L
Ni 231.604†	335.4	4.26	1.27%	[0.00]	µg/L
P 214.914†	202.5	3.63	1.79%	[0.00]	µg/L
Pb 220.353†	55.9	6.26	11.19%	[0.00]	µg/L
S 181.975 Axial†	25.5	2.90	11.37%	[0.00]	µg/L
Sb 206.836†	22.4	2.26	10.08%	[0.00]	µg/L
Se 196.026†	12.4	2.78	22.39%	[0.00]	µg/L
SiO2†	2278.8	21.91	0.96%	[0.00]	µg/L
Si 251.611†	304.5	6.10	2.00%	[0.00]	µg/L
Sn 189.927†	23.4	3.90	16.65%	[0.00]	µg/L
Sr 421.552†	557.7	6.70	1.20%	[0.00]	µg/L
Ti 334.940†	773.7	32.23	4.17%	[0.00]	µg/L
Tl 190.801†	-23.1	0.41	1.76%	[0.00]	µg/L
U 409.014†	-233.0	97.55	41.87%	[0.00]	µg/L
V 292.402†	-122.1	22.68	18.57%	[0.00]	µg/L
Zn 213.857†	671.3	5.87	0.87%	[0.00]	µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/27/2010 08:29:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	78569.0	78569.0	102	%	08:29:36
1	K 766.490 Radial†	1868.6	1415.0	[1000]	µg/L	08:29:36
1	Sr 421.552†	16590.2	15663.1	[100]	µg/L	08:29:36
1	Sc 361.383	1938827.9	1938827.9	99.765	%	08:29:58
1	Y 371.029	1224834.0	1224834.0	99.677	%	08:29:58
1	Ag 328.068†	10845.5	10926.1	[100]	µg/L	08:30:04
1	As 188.979†	45.7	45.3	[100]	µg/L	08:30:24
1	B 249.677†	2162.8	2052.7	[100]	µg/L	08:30:04
1	Ba 233.527†	3476.1	3498.8	[100]	µg/L	08:30:04
1	Be 313.107†	147785.1	144293.7	[100]	µg/L	08:29:58
1	Cd 226.502†	3334.4	3477.7	[100]	µg/L	08:30:04
1	Co 228.616†	1808.3	1857.5	[100]	µg/L	08:30:24
1	Cr 267.716†	4331.2	4424.2	[100]	µg/L	08:30:04
1	Cu 324.752†	17403.4	13776.2	[100]	µg/L	08:30:04
1	Mn 257.610†	27174.1	27427.5	[100]	µg/L	08:30:04
1	Mo 202.031†	842.9	827.6	[100]	µg/L	08:30:24
1	Ni 231.604†	1956.7	1625.8	[100]	µg/L	08:30:24
1	P 214.914†	414.2	212.7	[500]	µg/L	08:30:24
1	Pb 220.353†	415.9	360.9	[100]	µg/L	08:30:24
1	S 181.975 Axial†	60.8	35.4	[200]	µg/L	08:30:24
1	Sb 206.836†	124.0	101.9	[100]	µg/L	08:30:24
1	Se 196.026†	75.8	63.5	[100]	µg/L	08:30:24
1	SiO2†	7379.4	5118.0	[1069.5]	µg/L	08:30:04
1	Si 251.611†	6303.9	6014.2	[500]	µg/L	08:30:04
1	Sn 189.927†	201.2	178.2	[100]	µg/L	08:30:24
1	Ti 334.940†	40467.4	39789.1	[100]	µg/L	08:30:04
1	Tl 190.801†	37.7	60.8	[100]	µg/L	08:30:24
1	U 409.014†	837.2	1072.2	[100]	µg/L	08:30:04
1	V 292.402†	8069.1	8210.2	[100]	µg/L	08:30:04
1	Zn 213.857†	4190.3	3528.8	[100]	µg/L	08:30:04
2	Sc RADIAL	78405.0	78405.0	102	%	08:29:42
2	K 766.490 Radial†	1884.2	1434.1	[1000]	µg/L	08:29:42
2	Sr 421.552†	16566.3	15673.7	[100]	µg/L	08:29:42
2	Sc 361.383	1955896.1	1955896.1	100.64	%	08:30:30
2	Y 371.029	1237762.5	1237762.5	100.73	%	08:30:30
2	Ag 328.068†	10821.0	10806.9	[100]	µg/L	08:30:36
2	As 188.979†	45.4	44.6	[100]	µg/L	08:30:56
2	B 249.677†	2156.2	2027.2	[100]	µg/L	08:30:36
2	Ba 233.527†	3472.6	3464.9	[100]	µg/L	08:30:36
2	Be 313.107†	148254.9	143467.9	[100]	µg/L	08:30:30
2	Cd 226.502†	3334.0	3448.2	[100]	µg/L	08:30:36
2	Co 228.616†	1791.9	1825.5	[100]	µg/L	08:30:56
2	Cr 267.716†	4363.2	4418.1	[100]	µg/L	08:30:36
2	Cu 324.752†	17317.0	13538.1	[100]	µg/L	08:30:36
2	Mn 257.610†	27125.2	27141.3	[100]	µg/L	08:30:36
2	Mo 202.031†	836.7	814.1	[100]	µg/L	08:30:56
2	Ni 231.604†	1979.1	1631.0	[100]	µg/L	08:30:56
2	P 214.914†	425.5	220.3	[500]	µg/L	08:30:56
2	Pb 220.353†	411.7	353.1	[100]	µg/L	08:30:56
2	S 181.975 Axial†	59.2	33.3	[200]	µg/L	08:30:56
2	Sb 206.836†	124.9	101.7	[100]	µg/L	08:30:56
2	Se 196.026†	70.3	57.4	[100]	µg/L	08:30:56
2	SiO2†	7371.7	5045.8	[1069.5]	µg/L	08:30:36
2	Si 251.611†	6277.1	5932.4	[500]	µg/L	08:30:36
2	Sn 189.927†	203.8	179.1	[100]	µg/L	08:30:56
2	Ti 334.940†	40326.4	39294.9	[100]	µg/L	08:30:36
2	Tl 190.801†	40.7	63.5	[100]	µg/L	08:30:56
2	U 409.014†	808.1	1035.9	[100]	µg/L	08:30:36
2	V 292.402†	8058.1	8128.7	[100]	µg/L	08:30:36

2	Zn 213.857†	4190.0	3491.9	[100]	µg/L	08:30:36
3	Sc RADIAL	78492.0	78492.0	102	%	08:29:47
3	K 766.490 Radial†	1831.6	1380.6	[1000]	µg/L	08:29:47
3	Sr 421.552†	16597.8	15686.5	[100]	µg/L	08:29:47
3	Sc 361.383	1962005.4	1962005.4	100.96	%	08:31:03
3	Y 371.029	1239103.3	1239103.3	100.84	%	08:31:03
3	Ag 328.068†	11001.4	10952.1	[100]	µg/L	08:31:08
3	As 188.979†	46.3	45.4	[100]	µg/L	08:31:29
3	B 249.677†	2171.4	2035.6	[100]	µg/L	08:31:08
3	Ba 233.527†	3541.9	3522.9	[100]	µg/L	08:31:08
3	Be 313.107†	149152.3	143898.0	[100]	µg/L	08:31:03
3	Cd 226.502†	3401.8	3505.0	[100]	µg/L	08:31:08
3	Co 228.616†	1804.5	1832.4	[100]	µg/L	08:31:29
3	Cr 267.716†	4442.2	4482.8	[100]	µg/L	08:31:08
3	Cu 324.752†	17549.8	13715.1	[100]	µg/L	08:31:08
3	Mn 257.610†	27511.1	27439.6	[100]	µg/L	08:31:08
3	Mo 202.031†	838.9	813.8	[100]	µg/L	08:31:29
3	Ni 231.604†	1975.4	1621.3	[100]	µg/L	08:31:29
3	P 214.914†	409.6	203.3	[500]	µg/L	08:31:29
3	Pb 220.353†	420.0	360.1	[100]	µg/L	08:31:29
3	S 181.975 Axial†	56.5	30.4	[200]	µg/L	08:31:29
3	Sb 206.836†	117.8	94.3	[100]	µg/L	08:31:29
3	Se 196.026†	78.1	64.9	[100]	µg/L	08:31:29
3	SiO2†	7490.7	5140.8	[1069.5]	µg/L	08:31:08
3	Si 251.611†	6404.6	6039.4	[500]	µg/L	08:31:08
3	Sn 189.927†	202.3	176.9	[100]	µg/L	08:31:29
3	Ti 334.940†	40959.1	39796.9	[100]	µg/L	08:31:08
3	Tl 190.801†	34.9	57.6	[100]	µg/L	08:31:29
3	U 409.014†	795.0	1020.4	[100]	µg/L	08:31:08
3	V 292.402†	8153.4	8198.2	[100]	µg/L	08:31:08
3	Zn 213.857†	4244.2	3532.6	[100]	µg/L	08:31:08

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1952243.1	12012.81	0.62%	100.46	%
Sc RADIAL	78488.7	82.09	0.10%	102	%
Y 371.029	1233899.9	7879.88	0.64%	100.42	%
Ag 328.068†	10895.0	77.45	0.71%	[100]	µg/L
As 188.979†	45.1	0.43	0.95%	[100]	µg/L
B 249.677†	2038.5	13.00	0.64%	[100]	µg/L
Ba 233.527†	3495.5	29.10	0.83%	[100]	µg/L
Be 313.107†	143886.5	413.05	0.29%	[100]	µg/L
Cd 226.502†	3476.9	28.42	0.82%	[100]	µg/L
Co 228.616†	1838.5	16.88	0.92%	[100]	µg/L
Cr 267.716†	4441.7	35.72	0.80%	[100]	µg/L
Cu 324.752†	13676.5	123.67	0.90%	[100]	µg/L
K 766.490 Radial†	1409.9	27.13	1.92%	[1000]	µg/L
Mn 257.610†	27336.2	168.88	0.62%	[100]	µg/L
Mo 202.031†	818.5	7.91	0.97%	[100]	µg/L
Ni 231.604†	1626.1	4.88	0.30%	[100]	µg/L
P 214.914†	212.1	8.53	4.02%	[500]	µg/L
Pb 220.353†	358.1	4.30	1.20%	[100]	µg/L
S 181.975 Axial†	33.0	2.50	7.56%	[200]	µg/L
Sb 206.836†	99.3	4.34	4.37%	[100]	µg/L
Se 196.026†	62.0	3.99	6.44%	[100]	µg/L
SiO2†	5101.6	49.61	0.97%	[1069.5]	µg/L
Si 251.611†	5995.3	55.91	0.93%	[500]	µg/L
Sn 189.927†	178.1	1.10	0.62%	[100]	µg/L
Sr 421.552†	15674.4	11.69	0.07%	[100]	µg/L
Ti 334.940†	39627.0	287.58	0.73%	[100]	µg/L
Tl 190.801†	60.7	2.95	4.86%	[100]	µg/L
U 409.014†	1042.8	26.57	2.55%	[100]	µg/L
V 292.402†	8179.0	44.01	0.54%	[100]	µg/L
Zn 213.857†	3517.8	22.50	0.64%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 1/27/2010 08:31:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	78938.0	78938.0	103	%	08:32:11
1	Al 396.153Radial†	7457.1	7285.0	[5000]	µg/L	08:32:11
1	Ca 317.933Radial†	6883.7	6447.3	[5000]	µg/L	08:32:31
1	K 766.490 Radial†	8134.2	7503.9	[5000]	µg/L	08:32:11
1	Mg 279.077 IEC†	495.8	474.2	[5000]	µg/L	08:32:31
1	Sr 421.552†	81896.5	79141.0	[500]	µg/L	08:32:11
1	Sc 361.383	1968655.2	1968655.2	101.30	%	08:33:34
1	Y 371.029	1242104.6	1242104.6	101.08	%	08:33:34
1	Ag 328.068†	55330.9	54676.0	[500]	µg/L	08:33:40
1	As 188.979†	227.8	224.3	[500]	µg/L	08:34:00
1	B 249.677†	10672.2	10420.1	[500]	µg/L	08:33:40
1	Ba 233.527†	17883.6	17668.7	[500]	µg/L	08:33:40
1	Be 313.107†	751946.4	738458.1	[500]	µg/L	08:33:34
1	Cd 226.502†	17559.9	17470.1	[500]	µg/L	08:33:40
1	Co 228.616†	9396.0	9320.5	[500]	µg/L	08:33:40
1	Cr 267.716†	22430.1	22225.1	[500]	µg/L	08:33:40
1	Cu 324.752†	72871.0	68267.7	[500]	µg/L	08:33:40
1	Mn 257.610†	138098.1	136515.6	[500]	µg/L	08:33:40
1	Mo 202.031†	4155.4	4084.9	[500]	µg/L	08:34:00
1	Ni 231.604†	8600.4	8154.6	[500]	µg/L	08:33:40
1	P 214.914†	1314.3	1094.9	[2500]	µg/L	08:34:00
1	Pb 220.353†	1870.4	1790.5	[500]	µg/L	08:34:00
1	S 181.975 Axial†	206.0	177.9	[1000]	µg/L	08:34:00
1	Sb 206.836†	489.2	460.5	[500]	µg/L	08:34:00
1	Se 196.026†	338.2	321.5	[500]	µg/L	08:34:00
1	SiO2†	28755.0	26107.2	[5347.5]	µg/L	08:33:40
1	Si 251.611†	31391.2	30683.9	[2500]	µg/L	08:33:40
1	Sn 189.927†	942.0	906.5	[500]	µg/L	08:34:00
1	Ti 334.940†	209697.9	206233.4	[500]	µg/L	08:33:34
1	Tl 190.801†	280.4	299.9	[500]	µg/L	08:34:00
1	U 409.014†	5155.7	5322.5	[500]	µg/L	08:33:40
1	V 292.402†	41855.5	41440.5	[500]	µg/L	08:33:40
1	Zn 213.857†	18535.8	17626.7	[500]	µg/L	08:33:40
2	Sc RADIAL	78548.1	78548.1	102	%	08:32:37
2	Al 396.153Radial†	7433.0	7297.4	[5000]	µg/L	08:32:37
2	Ca 317.933Radial†	6832.3	6430.3	[5000]	µg/L	08:32:57
2	K 766.490 Radial†	8107.9	7517.5	[5000]	µg/L	08:32:37
2	Mg 279.077 IEC†	487.5	468.5	[5000]	µg/L	08:32:57
2	Sr 421.552†	81515.8	79164.5	[500]	µg/L	08:32:37
2	Sc 361.383	1972139.4	1972139.4	101.48	%	08:34:07
2	Y 371.029	1242750.3	1242750.3	101.14	%	08:34:07
2	Ag 328.068†	55470.7	54717.2	[500]	µg/L	08:34:13
2	As 188.979†	229.3	225.4	[500]	µg/L	08:34:33
2	B 249.677†	10709.2	10437.9	[500]	µg/L	08:34:13
2	Ba 233.527†	17898.8	17652.4	[500]	µg/L	08:34:13
2	Be 313.107†	744397.6	729708.0	[500]	µg/L	08:34:07
2	Cd 226.502†	17652.9	17531.1	[500]	µg/L	08:34:13
2	Co 228.616†	9423.6	9331.3	[500]	µg/L	08:34:13
2	Cr 267.716†	22551.2	22305.3	[500]	µg/L	08:34:13
2	Cu 324.752†	73127.2	68393.1	[500]	µg/L	08:34:13
2	Mn 257.610†	138444.4	136616.0	[500]	µg/L	08:34:13
2	Mo 202.031†	4182.0	4103.8	[500]	µg/L	08:34:33
2	Ni 231.604†	8656.8	8195.2	[500]	µg/L	08:34:13
2	P 214.914†	1313.5	1091.8	[2500]	µg/L	08:34:33
2	Pb 220.353†	1879.7	1796.3	[500]	µg/L	08:34:33
2	S 181.975 Axial†	207.5	179.0	[1000]	µg/L	08:34:33
2	Sb 206.836†	515.1	485.2	[500]	µg/L	08:34:33
2	Se 196.026†	335.4	318.1	[500]	µg/L	08:34:33
2	SiO2†	28776.8	26078.6	[5347.5]	µg/L	08:34:13

2	Si 251.611†	31526.6	30762.5	[2500]	µg/L	08:34:13
2	Sn 189.927†	941.7	904.5	[500]	µg/L	08:34:33
2	Ti 334.940†	207775.3	203973.1	[500]	µg/L	08:34:07
2	Tl 190.801†	283.9	302.8	[500]	µg/L	08:34:33
2	U 409.014†	5241.3	5397.9	[500]	µg/L	08:34:13
2	V 292.402†	41944.0	41454.7	[500]	µg/L	08:34:13
2	Zn 213.857†	18588.0	17645.7	[500]	µg/L	08:34:13
3	Sc RADIAL	78235.1	78235.1	102	%	08:33:03
3	Al 396.153Radial†	7408.9	7302.8	[5000]	µg/L	08:33:03
3	Ca 317.933Radial†	6824.7	6449.6	[5000]	µg/L	08:33:23
3	K 766.490 Radial†	8092.9	7534.5	[5000]	µg/L	08:33:03
3	Mg 279.077 IEC†	490.0	472.9	[5000]	µg/L	08:33:23
3	Sr 421.552†	81351.5	79322.1	[500]	µg/L	08:33:03
3	Sc 361.383	1952151.4	1952151.4	100.45	%	08:34:40
3	Y 371.029	1232809.8	1232809.8	100.33	%	08:34:40
3	Ag 328.068†	54086.5	53899.0	[500]	µg/L	08:34:46
3	As 188.979†	204.3	202.8	[500]	µg/L	08:35:06
3	B 249.677†	10366.9	10205.1	[500]	µg/L	08:34:46
3	Ba 233.527†	17108.3	17046.1	[500]	µg/L	08:34:46
3	Be 313.107†	725489.3	718395.3	[500]	µg/L	08:34:40
3	Cd 226.502†	16783.2	16843.3	[500]	µg/L	08:34:46
3	Co 228.616†	8943.5	8948.4	[500]	µg/L	08:34:46
3	Cr 267.716†	21136.1	21124.1	[500]	µg/L	08:34:46
3	Cu 324.752†	69734.2	65753.2	[500]	µg/L	08:34:46
3	Mn 257.610†	131446.7	131046.5	[500]	µg/L	08:34:46
3	Mo 202.031†	3698.0	3664.2	[500]	µg/L	08:35:06
3	Ni 231.604†	8247.8	7875.4	[500]	µg/L	08:34:46
3	P 214.914†	1208.6	1000.7	[2500]	µg/L	08:35:06
3	Pb 220.353†	1726.8	1663.1	[500]	µg/L	08:35:06
3	S 181.975 Axial†	194.8	168.4	[1000]	µg/L	08:35:06
3	Sb 206.836†	464.9	440.4	[500]	µg/L	08:35:06
3	Se 196.026†	321.4	307.6	[500]	µg/L	08:35:06
3	SiO2†	27821.3	25417.7	[5347.5]	µg/L	08:34:46
3	Si 251.611†	30403.6	29962.7	[2500]	µg/L	08:34:46
3	Sn 189.927†	829.7	802.6	[500]	µg/L	08:35:06
3	Ti 334.940†	201953.4	200273.7	[500]	µg/L	08:34:40
3	Tl 190.801†	261.6	283.5	[500]	µg/L	08:35:06
3	U 409.014†	4937.6	5148.4	[500]	µg/L	08:34:46
3	V 292.402†	39802.1	39745.7	[500]	µg/L	08:34:46
3	Zn 213.857†	17753.1	17002.2	[500]	µg/L	08:34:46

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1964315.3	10677.38	0.54%	101.08	%
Sc RADIAL	78573.7	352.19	0.45%	102	%
Y 371.029	1239221.5	5562.12	0.45%	100.85	%
Ag 328.068†	54430.7	460.99	0.85%	[500]	µg/L
Al 396.153Radial†	7295.1	9.17	0.13%	[5000]	µg/L
As 188.979†	217.5	12.73	5.85%	[500]	µg/L
B 249.677†	10354.4	129.53	1.25%	[500]	µg/L
Ba 233.527†	17455.7	354.87	2.03%	[500]	µg/L
Be 313.107†	728853.8	10058.64	1.38%	[500]	µg/L
Ca 317.933Radial†	6442.4	10.53	0.16%	[5000]	µg/L
Cd 226.502†	17281.5	380.68	2.20%	[500]	µg/L
Co 228.616†	9200.0	218.01	2.37%	[500]	µg/L
Cr 267.716†	21884.8	660.05	3.02%	[500]	µg/L
Cu 324.752†	67471.3	1489.30	2.21%	[500]	µg/L
K 766.490 Radial†	7518.6	15.30	0.20%	[5000]	µg/L
Mg 279.077 IEC†	471.9	3.00	0.64%	[5000]	µg/L
Mn 257.610†	134726.0	3186.95	2.37%	[500]	µg/L
Mo 202.031†	3951.0	248.53	6.29%	[500]	µg/L
Ni 231.604†	8075.1	174.15	2.16%	[500]	µg/L
P 214.914†	1062.5	53.55	5.04%	[2500]	µg/L
Pb 220.353†	1750.0	75.27	4.30%	[500]	µg/L
S 181.975 Axial†	175.1	5.81	3.32%	[1000]	µg/L
Sb 206.836†	462.0	22.41	4.85%	[500]	µg/L
Se 196.026†	315.7	7.25	2.30%	[500]	µg/L
SiO2†	25867.8	390.09	1.51%	[5347.5]	µg/L
Si 251.611†	30469.7	440.83	1.45%	[2500]	µg/L

Sn 189.927†	871.2	59.44	6.82%	[500] µg/L
Sr 421.552†	79209.2	98.45	0.12%	[500] µg/L
Ti 334.940†	203493.4	3008.65	1.48%	[500] µg/L
Tl 190.801†	295.4	10.42	3.53%	[500] µg/L
U 409.014†	5289.6	127.98	2.42%	[500] µg/L
V 292.402†	40880.3	982.64	2.40%	[500] µg/L
Zn 213.857†	17424.9	366.19	2.10%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 1/27/2010 08:35:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	78758.1	78758.1	103	%	08:35:48
1	Al 396.153Radial†	14859.0	14521.2	[10000]	µg/L	08:35:48
1	Ca 317.933Radial†	13454.0	12871.2	[10000]	µg/L	08:35:48
1	Fe 238.204 Radial†	726.2	692.4	[10000]	µg/L	08:36:09
1	K 766.490 Radial†	15902.8	15099.4	[10000]	µg/L	08:35:48
1	Mg 279.077 IEC†	952.4	920.7	[10000]	µg/L	08:36:09
1	Na 589.592 Radial†	36239.9	34803.1	[10000]	µg/L	08:35:48
1	Sr 421.552†	161516.1	156983.2	[1000]	µg/L	08:35:48
1	Sc 361.383	1968396.8	1968396.8	101.29	%	08:37:13
1	Y 371.029	1238215.3	1238215.3	100.77	%	08:37:13
1	Ag 328.068†	108989.9	107660.6	[1000]	µg/L	08:37:18
1	As 188.979†	459.9	453.5	[1000]	µg/L	08:37:39
1	B 249.677†	21117.7	20734.2	[1000]	µg/L	08:37:18
1	Ba 233.527†	35225.4	34792.4	[1000]	µg/L	08:37:18
1	Be 313.107†	1471640.7	1449108.2	[1000]	µg/L	08:37:13
1	Cd 226.502†	34644.6	34340.0	[1000]	µg/L	08:37:18
1	Co 228.616†	18595.2	18404.0	[1000]	µg/L	08:37:18
1	Cr 267.716†	44517.9	44035.2	[1000]	µg/L	08:37:18
1	Cu 324.752†	140490.9	135038.1	[1000]	µg/L	08:37:18
1	Mn 257.610†	278000.7	274659.0	[1000]	µg/L	08:37:13
1	Mo 202.031†	8244.8	8122.9	[1000]	µg/L	08:37:18
1	Ni 231.604†	16671.0	16123.9	[1000]	µg/L	08:37:18
1	P 214.914†	2395.1	2162.1	[5000]	µg/L	08:37:39
1	Pb 220.353†	3644.4	3542.1	[1000]	µg/L	08:37:39
1	S 181.975 Axial†	391.2	360.7	[2000]	µg/L	08:37:39
1	Sb 206.836†	968.3	933.6	[1000]	µg/L	08:37:39
1	Se 196.026†	676.2	655.2	[1000]	µg/L	08:37:39
1	SiO2†	53959.8	50995.6	[10695]	µg/L	08:37:18
1	Si 251.611†	61134.1	60053.1	[5000]	µg/L	08:37:18
1	Sn 189.927†	1842.4	1795.6	[1000]	µg/L	08:37:39
1	Ti 334.940†	411279.3	405281.5	[1000]	µg/L	08:37:13
1	Tl 190.801†	572.3	588.1	[1000]	µg/L	08:37:39
1	U 409.014†	10613.9	10712.0	[1000]	µg/L	08:37:18
1	V 292.402†	82638.5	81711.0	[1000]	µg/L	08:37:18
1	Zn 213.857†	35912.1	34784.6	[1000]	µg/L	08:37:18
2	Sc RADIAL	78683.2	78683.2	102	%	08:36:14
2	Al 396.153Radial†	14798.9	14476.4	[10000]	µg/L	08:36:14
2	Ca 317.933Radial†	13403.8	12834.7	[10000]	µg/L	08:36:14
2	Fe 238.204 Radial†	732.3	699.1	[10000]	µg/L	08:36:35
2	K 766.490 Radial†	15863.8	15076.0	[10000]	µg/L	08:36:14
2	Mg 279.077 IEC†	960.9	929.9	[10000]	µg/L	08:36:35
2	Na 589.592 Radial†	36221.7	34818.9	[10000]	µg/L	08:36:14
2	Sr 421.552†	161122.0	156748.3	[1000]	µg/L	08:36:14
2	Sc 361.383	1961486.2	1961486.2	100.93	%	08:37:46
2	Y 371.029	1234525.6	1234525.6	100.47	%	08:37:46
2	Ag 328.068†	108730.7	107782.9	[1000]	µg/L	08:37:52
2	As 188.979†	455.1	450.3	[1000]	µg/L	08:38:12
2	B 249.677†	21032.5	20723.3	[1000]	µg/L	08:37:52
2	Ba 233.527†	35130.3	34820.8	[1000]	µg/L	08:37:52
2	Be 313.107†	1463671.2	1446331.1	[1000]	µg/L	08:37:46
2	Cd 226.502†	34565.6	34382.2	[1000]	µg/L	08:37:52
2	Co 228.616†	18523.9	18398.1	[1000]	µg/L	08:37:52
2	Cr 267.716†	44412.5	44085.7	[1000]	µg/L	08:37:52
2	Cu 324.752†	140072.0	135111.8	[1000]	µg/L	08:37:52
2	Mn 257.610†	276284.1	273925.1	[1000]	µg/L	08:37:46
2	Mo 202.031†	8216.6	8123.6	[1000]	µg/L	08:37:52
2	Ni 231.604†	16581.5	16093.1	[1000]	µg/L	08:37:52
2	P 214.914†	2393.3	2168.7	[5000]	µg/L	08:38:12
2	Pb 220.353†	3619.5	3530.2	[1000]	µg/L	08:38:12

2	S 181.975 Axial†	386.1	357.0	[2000]	µg/L	08:38:12
2	Sb 206.836†	963.9	932.6	[1000]	µg/L	08:38:12
2	Se 196.026†	668.7	650.1	[1000]	µg/L	08:38:12
2	SiO2†	53848.9	51073.4	[10695]	µg/L	08:37:52
2	Si 251.611†	60903.2	60037.0	[5000]	µg/L	08:37:52
2	Sn 189.927†	1827.3	1787.0	[1000]	µg/L	08:38:12
2	Ti 334.940†	409230.6	404682.2	[1000]	µg/L	08:37:46
2	Tl 190.801†	569.3	587.1	[1000]	µg/L	08:38:12
2	U 409.014†	10631.3	10766.3	[1000]	µg/L	08:37:52
2	V 292.402†	82359.7	81722.1	[1000]	µg/L	08:37:52
2	Zn 213.857†	35797.7	34796.2	[1000]	µg/L	08:37:52
3	Sc RADIAL	78843.3	78843.3	103	%	08:36:40
3	Al 396.153Radial†	14950.8	14595.0	[10000]	µg/L	08:36:40
3	Ca 317.933Radial†	13511.2	12912.8	[10000]	µg/L	08:36:40
3	Fe 238.204 Radial†	730.0	695.4	[10000]	µg/L	08:37:01
3	K 766.490 Radial†	15885.1	15065.4	[10000]	µg/L	08:36:40
3	Mg 279.077 IEC†	961.6	928.6	[10000]	µg/L	08:37:01
3	Na 589.592 Radial†	36393.6	34914.6	[10000]	µg/L	08:36:40
3	Sr 421.552†	162387.5	157661.9	[1000]	µg/L	08:36:40
3	Sc 361.383	1962778.1	1962778.1	101.00	%	08:38:19
3	Y 371.029	1234258.6	1234258.6	100.44	%	08:38:19
3	Ag 328.068†	106148.3	105155.1	[1000]	µg/L	08:38:25
3	As 188.979†	398.9	394.4	[1000]	µg/L	08:38:45
3	B 249.677†	20414.6	20097.8	[1000]	µg/L	08:38:25
3	Ba 233.527†	33578.2	33261.1	[1000]	µg/L	08:38:25
3	Be 313.107†	1411372.9	1393594.8	[1000]	µg/L	08:38:19
3	Cd 226.502†	32912.3	32722.7	[1000]	µg/L	08:38:25
3	Co 228.616†	17461.1	17333.7	[1000]	µg/L	08:38:25
3	Cr 267.716†	41011.8	40689.6	[1000]	µg/L	08:38:25
3	Cu 324.752†	132250.2	127275.9	[1000]	µg/L	08:38:25
3	Mn 257.610†	266785.7	264340.5	[1000]	µg/L	08:38:19
3	Mo 202.031†	7770.6	7676.7	[1000]	µg/L	08:38:25
3	Ni 231.604†	15667.3	15177.2	[1000]	µg/L	08:38:25
3	P 214.914†	2129.6	1906.0	[5000]	µg/L	08:38:45
3	Pb 220.353†	3245.2	3157.2	[1000]	µg/L	08:38:45
3	S 181.975 Axial†	357.6	328.5	[2000]	µg/L	08:38:45
3	Sb 206.836†	856.7	825.8	[1000]	µg/L	08:38:45
3	Se 196.026†	613.6	595.1	[1000]	µg/L	08:38:45
3	SiO2†	51921.6	49130.1	[10695]	µg/L	08:38:25
3	Si 251.611†	58620.8	57737.4	[5000]	µg/L	08:38:25
3	Sn 189.927†	1572.1	1533.2	[1000]	µg/L	08:38:45
3	Ti 334.940†	393216.4	388559.3	[1000]	µg/L	08:38:19
3	Tl 190.801†	539.9	557.6	[1000]	µg/L	08:38:45
3	U 409.014†	9748.6	9885.3	[1000]	µg/L	08:38:25
3	V 292.402†	77420.4	76778.0	[1000]	µg/L	08:38:25
3	Zn 213.857†	33891.9	32885.9	[1000]	µg/L	08:38:25

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1964220.3	3674.09	0.19%	101.07	%
Sc RADIAL	78761.5	80.10	0.10%	103	%
Y 371.029	1235666.5	2211.36	0.18%	100.56	%
Ag 328.068†	106866.2	1483.12	1.39%	[1000]	µg/L
Al 396.153Radial†	14530.8	59.89	0.41%	[10000]	µg/L
As 188.979†	432.7	33.26	7.69%	[1000]	µg/L
B 249.677†	20518.4	364.32	1.78%	[1000]	µg/L
Ba 233.527†	34291.4	892.43	2.60%	[1000]	µg/L
Be 313.107†	1429678.0	31279.80	2.19%	[1000]	µg/L
Ca 317.933Radial†	12872.9	39.09	0.30%	[10000]	µg/L
Cd 226.502†	33814.9	946.16	2.80%	[1000]	µg/L
Co 228.616†	18045.3	616.23	3.41%	[1000]	µg/L
Cr 267.716†	42936.8	1946.32	4.53%	[1000]	µg/L
Cu 324.752†	132475.3	4502.93	3.40%	[1000]	µg/L
Fe 238.204 Radial†	695.6	3.35	0.48%	[10000]	µg/L
K 766.490 Radial†	15080.3	17.38	0.12%	[10000]	µg/L
Mg 279.077 IEC†	926.4	4.98	0.54%	[10000]	µg/L
Mn 257.610†	270974.9	5757.25	2.12%	[1000]	µg/L
Mo 202.031†	7974.4	257.81	3.23%	[1000]	µg/L
Na 589.592 Radial†	34845.5	60.35	0.17%	[10000]	µg/L

Ni 231.604†	15798.0	537.91	3.40%	[1000]	µg/L
P 214.914†	2079.0	149.79	7.21%	[5000]	µg/L
Pb 220.353†	3409.8	218.85	6.42%	[1000]	µg/L
S 181.975 Axial†	348.8	17.63	5.06%	[2000]	µg/L
Sb 206.836†	897.4	61.98	6.91%	[1000]	µg/L
Se 196.026†	633.5	33.33	5.26%	[1000]	µg/L
SiO2†	50399.7	1100.20	2.18%	[10695]	µg/L
Si 251.611†	59275.8	1332.33	2.25%	[5000]	µg/L
Sn 189.927†	1705.3	149.11	8.74%	[1000]	µg/L
Sr 421.552†	157131.1	474.42	0.30%	[1000]	µg/L
Ti 334.940†	399507.7	9486.30	2.37%	[1000]	µg/L
Tl 190.801†	577.6	17.34	3.00%	[1000]	µg/L
U 409.014†	10454.5	493.68	4.72%	[1000]	µg/L
V 292.402†	80070.4	2851.29	3.56%	[1000]	µg/L
Zn 213.857†	34155.5	1099.60	3.22%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/27/2010 08:38:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	77557.9	77557.9	101	%	08:39:27
1	Al 396.153Radial†	73198.7	72530.0	[50000]	µg/L	08:39:27
1	Ca 317.933Radial†	64881.9	64012.6	[50000]	µg/L	08:39:27
1	Fe 238.204 Radial†	1422.2	1392.8	[20000]	µg/L	08:39:47
1	Mg 279.077 IEC†	4635.7	4583.2	[50000]	µg/L	08:39:47
1	Na 589.592 Radial†	71371.3	70147.0	[20000]	µg/L	08:39:27
1	Sc 361.383	1954736.5	1954736.5	100.58	%	08:40:51
1	Y 371.029	1222696.2	1222696.2	99.503	%	08:40:51
2	Sc RADIAL	77462.6	77462.6	101	%	08:39:53
2	Al 396.153Radial†	72227.6	71656.1	[50000]	µg/L	08:39:53
2	Ca 317.933Radial†	63940.6	63158.3	[50000]	µg/L	08:39:53
2	Fe 238.204 Radial†	1432.1	1404.3	[20000]	µg/L	08:40:13
2	Mg 279.077 IEC†	4664.0	4617.0	[50000]	µg/L	08:40:13
2	Na 589.592 Radial†	70586.8	69456.0	[20000]	µg/L	08:39:53
2	Sc 361.383	1972775.4	1972775.4	101.51	%	08:40:59
2	Y 371.029	1234012.3	1234012.3	100.42	%	08:40:59
3	Sc RADIAL	78064.1	78064.1	102	%	08:40:19
3	Al 396.153Radial†	72705.7	71574.7	[50000]	µg/L	08:40:19
3	Ca 317.933Radial†	64472.0	63192.6	[50000]	µg/L	08:40:19
3	Fe 238.204 Radial†	1422.1	1383.5	[20000]	µg/L	08:40:39
3	Mg 279.077 IEC†	4636.0	4553.8	[50000]	µg/L	08:40:39
3	Na 589.592 Radial†	70980.6	69304.2	[20000]	µg/L	08:40:19
3	Sc 361.383	1967490.2	1967490.2	101.24	%	08:41:06
3	Y 371.029	1230263.9	1230263.9	100.12	%	08:41:06

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1965000.7	9273.53	0.47%	101.11	%
Sc RADIAL	77694.8	323.28	0.42%	101	%
Y 371.029	1228990.8	5764.48	0.47%	100.02	%
Al 396.153Radial†	71920.3	529.59	0.74%	[50000]	µg/L
Ca 317.933Radial†	63454.5	483.66	0.76%	[50000]	µg/L
Fe 238.204 Radial†	1393.6	10.42	0.75%	[20000]	µg/L
Mg 279.077 IEC†	4584.7	31.58	0.69%	[50000]	µg/L
Na 589.592 Radial†	69635.8	449.24	0.65%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	107.3	0.00000	0.999972	
Al 396.153Radial	3	Lin Thru 0	0.0	1.439	0.00000	0.999997	
As 188.979	3	Lin Thru 0	0.0	0.4333	0.00000	0.999992	
B 249.677	3	Lin Thru 0	0.0	20.56	0.00000	0.999993	
Ba 233.527	3	Lin Thru 0	0.0	34.42	0.00000	0.999973	
Be 313.107	3	Lin Thru 0	0.0	1435	0.00000	0.999970	
Ca 317.933Radial	3	Lin Thru 0	0.0	1.270	0.00000	0.999995	
Cd 226.502	3	Lin Thru 0	0.0	33.97	0.00000	0.999959	
Co 228.616	3	Lin Thru 0	0.0	18.12	0.00000	0.999969	
Cr 267.716	3	Lin Thru 0	0.0	43.11	0.00000	0.999967	
Cu 324.752	3	Lin Thru 0	0.0	133.0	0.00000	0.999969	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0697	0.00000	1.000000	
K 766.490 Radial	3	Lin Thru 0	0.0	1.506	0.00000	0.999983	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0918	0.00000	0.999994	
Mn 257.610	3	Lin Thru 0	0.0	270.7	0.00000	0.999997	
Mo 202.031	3	Lin Thru 0	0.0	7.962	0.00000	0.999990	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.482	0.00000	1.000000	

Ni 231.604	3	Lin Thru 0	0.0	15.87	0.00000	0.999959
P 214.914	3	Lin Thru 0	0.0	0.4177	0.00000	0.999961
Pb 220.353	3	Lin Thru 0	0.0	3.429	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.1744	0.00000	0.999987
Sb 206.836	3	Lin Thru 0	0.0	0.9034	0.00000	0.999891
Se 196.026	3	Lin Thru 0	0.0	0.6330	0.00000	0.999997
SiO2	3	Lin Thru 0	0.0	4.738	0.00000	0.999945
Si 251.611	3	Lin Thru 0	0.0	11.92	0.00000	0.999938
Sn 189.927	3	Lin Thru 0	0.0	1.713	0.00000	0.999956
Sr 421.552	3	Lin Thru 0	0.0	157.4	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	401.0	0.00000	0.999972
Tl 190.801	3	Lin Thru 0	0.0	0.5805	0.00000	0.999951
U 409.014	3	Lin Thru 0	0.0	10.48	0.00000	0.999989
V 292.402	3	Lin Thru 0	0.0	80.42	0.00000	0.999964
Zn 213.857	3	Lin Thru 0	0.0	34.30	0.00000	0.999965

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 1/27/2010 08:41:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	79051.4	79051.4	103	%			08:41:49
1	Al 396.153Radial†	7444.6	7262.4	5034.9	µg/L	5034.9	ppb	08:41:49
1	Ca 317.933Radial†	6641.4	6202.2	4883.8	µg/L	4883.8	ppb	08:42:09
1	Fe 238.204 Radial†	377.6	351.0	5050.3	µg/L	5050.3	ppb	08:42:09
1	K 766.490 Radial†	4093.6	3566.0	2367.2	µg/L	2367.2	ppb	08:41:49
1	Mg 279.077 IEC†	496.1	473.8	5168.0	µg/L	5168.0	ppb	08:42:09
1	Na 589.592 Radial†	9206.4	8401.6	2412.6	µg/L	2412.6	ppb	08:41:49
1	Sr 421.552†	84707.2	81758.1	519.48	µg/L	519.48	ppb	08:41:49
1	Sc 361.383	1963098.9	1963098.9	101.01	%			08:43:12
1	Y 371.029	1236485.8	1236485.8	100.63	%			08:43:12
1	Ag 328.068†	28098.4	27871.5	263.54	µg/L	263.54	ppb	08:43:18
1	As 188.979†	219.2	216.4	498.43	µg/L	498.43	ppb	08:43:39
1	B 249.677†	10890.0	10665.5	517.04	µg/L	517.04	ppb	08:43:18
1	Ba 233.527†	17704.8	17541.6	510.57	µg/L	510.57	ppb	08:43:18
1	Be 313.107†	386773.1	379051.4	263.90	µg/L	263.90	ppb	08:43:12
1	Cd 226.502†	17197.2	17160.0	505.08	µg/L	505.08	ppb	08:43:18
1	Co 228.616†	9363.5	9314.5	513.55	µg/L	513.55	ppb	08:43:18
1	Cr 267.716†	21561.6	21428.0	497.34	µg/L	497.34	ppb	08:43:18
1	Cu 324.752†	72462.3	68066.7	512.48	µg/L	512.48	ppb	08:43:18
1	Mn 257.610†	138725.5	137522.5	508.50	µg/L	508.50	ppb	08:43:18
1	Mo 202.031†	4469.3	4407.3	553.75	µg/L	553.75	ppb	08:43:39
1	Ni 231.604†	8487.3	8066.7	507.70	µg/L	507.70	ppb	08:43:18
1	P 214.914†	1319.3	1103.6	2594.0	µg/L	2594.0	ppb	08:43:39
1	Pb 220.353†	1861.8	1787.2	521.49	µg/L	521.49	ppb	08:43:39
1	S 181.975 Axial†	491.2	460.7	2641.0	µg/L	2641.0	ppb	08:43:39
1	Sb 206.836†	512.5	485.0	539.92	µg/L	539.92	ppb	08:43:39
1	Se 196.026†	1738.4	1708.5	2717.6	µg/L	2717.6	ppb	08:43:39
1	SiO2†	53334.3	50520.2	10663	µg/L	10663	ppb	08:43:18
1	Si 251.611†	60130.3	59222.2	4967.4	µg/L	4967.4	ppb	08:43:18
1	Sn 189.927†	1015.7	982.1	575.76	µg/L	575.76	ppb	08:43:39
1	Ti 334.940†	203934.3	201113.6	501.24	µg/L	501.24	ppb	08:43:12
1	Tl 190.801†	296.2	316.3	549.24	µg/L	549.24	ppb	08:43:39
1	U 409.014†	5079.0	5261.0	501.05	µg/L	501.05	ppb	08:43:18
1	V 292.402†	42002.9	41703.4	524.78	µg/L	524.78	ppb	08:43:18
1	Zn 213.857†	18676.7	17817.9	515.85	µg/L	515.85	ppb	08:43:18
2	Sc RADIAL	79195.8	79195.8	103	%			08:42:15
2	Al 396.153Radial†	7477.6	7281.2	5048.0	µg/L	5048.0	ppb	08:42:15
2	Ca 317.933Radial†	6639.0	6188.2	4872.7	µg/L	4872.7	ppb	08:42:35
2	Fe 238.204 Radial†	370.7	343.7	4945.8	µg/L	4945.8	ppb	08:42:35
2	K 766.490 Radial†	4078.1	3543.7	2352.5	µg/L	2352.5	ppb	08:42:15
2	Mg 279.077 IEC†	494.7	471.6	5143.5	µg/L	5143.5	ppb	08:42:35
2	Na 589.592 Radial†	9245.2	8422.9	2418.7	µg/L	2418.7	ppb	08:42:15
2	Sr 421.552†	85195.7	82081.8	521.54	µg/L	521.54	ppb	08:42:15
2	Sc 361.383	1956579.9	1956579.9	100.68	%			08:43:45
2	Y 371.029	1234224.7	1234224.7	100.44	%			08:43:45
2	Ag 328.068†	28487.9	28351.0	268.07	µg/L	268.07	ppb	08:43:51
2	As 188.979†	221.9	219.9	506.35	µg/L	506.35	ppb	08:44:11
2	B 249.677†	11020.1	10830.6	525.14	µg/L	525.14	ppb	08:43:51
2	Ba 233.527†	18021.5	17914.5	521.43	µg/L	521.43	ppb	08:43:51
2	Be 313.107†	390557.4	384085.9	267.40	µg/L	267.40	ppb	08:43:45
2	Cd 226.502†	17456.0	17473.8	514.34	µg/L	514.34	ppb	08:43:51
2	Co 228.616†	9521.2	9502.1	523.89	µg/L	523.89	ppb	08:43:51
2	Cr 267.716†	21872.5	21807.9	506.15	µg/L	506.15	ppb	08:43:51
2	Cu 324.752†	73520.6	69356.9	522.17	µg/L	522.17	ppb	08:43:51
2	Mn 257.610†	140818.6	140059.1	517.86	µg/L	517.86	ppb	08:43:51
2	Mo 202.031†	4447.6	4400.4	552.89	µg/L	552.89	ppb	08:44:11
2	Ni 231.604†	8622.7	8229.2	517.93	µg/L	517.93	ppb	08:43:51
2	P 214.914†	1310.4	1099.1	2582.2	µg/L	2582.2	ppb	08:44:11
2	Pb 220.353†	1868.1	1799.6	525.07	µg/L	525.07	ppb	08:44:11

2	S 181.975 Axial†	484.1	455.3	2610.1 µg/L	2610.1 ppb	08:44:11
2	Sb 206.836†	504.0	478.2	532.29 µg/L	532.29 ppb	08:44:11
2	Se 196.026†	1729.7	1705.6	2712.6 µg/L	2712.6 ppb	08:44:11
2	SiO2†	54087.7	51444.4	10859 µg/L	10859 ppb	08:43:51
2	Si 251.611†	61010.9	60295.2	5057.4 µg/L	5057.4 ppb	08:43:51
2	Sn 189.927†	1013.3	983.1	576.34 µg/L	576.34 ppb	08:44:11
2	Ti 334.940†	205645.6	203486.0	507.16 µg/L	507.16 ppb	08:43:45
2	Tl 190.801†	297.8	318.9	553.76 µg/L	553.76 ppb	08:44:11
2	U 409.014†	5088.0	5286.7	503.52 µg/L	503.52 ppb	08:43:51
2	V 292.402†	42655.2	42489.9	534.57 µg/L	534.57 ppb	08:43:51
2	Zn 213.857†	18999.1	18199.7	526.93 µg/L	526.93 ppb	08:43:51
3	Sc RADIAL	78786.2	78786.2	103 %		08:42:41
3	Al 396.153Radial†	7485.5	7326.6	5081.0 µg/L	5081.0 ppb	08:42:41
3	Ca 317.933Radial†	6653.3	6235.6	4910.0 µg/L	4910.0 ppb	08:43:01
3	Fe 238.204 Radial†	375.7	350.5	5042.0 µg/L	5042.0 ppb	08:43:01
3	K 766.490 Radial†	4187.3	3670.8	2436.8 µg/L	2436.8 ppb	08:42:41
3	Mg 279.077 IEC†	496.5	475.8	5188.2 µg/L	5188.2 ppb	08:43:01
3	Na 589.592 Radial†	9263.9	8487.7	2437.4 µg/L	2437.4 ppb	08:42:41
3	Sr 421.552†	85234.0	82548.8	524.51 µg/L	524.51 ppb	08:42:41
3	Sc 361.383	1945853.7	1945853.7	100.13 %		08:44:18
3	Y 371.029	1226795.5	1226795.5	99.837 %		08:44:18
3	Ag 328.068†	27503.9	27524.2	260.14 µg/L	260.14 ppb	08:44:24
3	As 188.979†	195.2	194.4	447.78 µg/L	447.78 ppb	08:44:44
3	B 249.677†	10576.6	10448.0	506.41 µg/L	506.41 ppb	08:44:24
3	Ba 233.527†	16984.7	16977.8	494.15 µg/L	494.15 ppb	08:44:24
3	Be 313.107†	374101.0	369788.6	257.45 µg/L	257.45 ppb	08:44:18
3	Cd 226.502†	16375.3	16490.1	485.34 µg/L	485.34 ppb	08:44:24
3	Co 228.616†	8856.5	8890.3	490.10 µg/L	490.10 ppb	08:44:24
3	Cr 267.716†	20047.2	20104.6	466.63 µg/L	466.63 ppb	08:44:24
3	Cu 324.752†	69086.7	65331.1	491.91 µg/L	491.91 ppb	08:44:24
3	Mn 257.610†	131380.4	131403.8	485.90 µg/L	485.90 ppb	08:44:24
3	Mo 202.031†	3861.6	3839.5	482.44 µg/L	482.44 ppb	08:44:44
3	Ni 231.604†	8106.3	7760.6	488.44 µg/L	488.44 ppb	08:44:24
3	P 214.914†	1192.3	988.3	2319.1 µg/L	2319.1 ppb	08:44:44
3	Pb 220.353†	1660.9	1602.9	467.59 µg/L	467.59 ppb	08:44:44
3	S 181.975 Axial†	443.1	417.0	2390.3 µg/L	2390.3 ppb	08:44:44
3	Sb 206.836†	453.8	430.9	479.20 µg/L	479.20 ppb	08:44:44
3	Se 196.026†	1574.0	1559.6	2482.3 µg/L	2482.3 ppb	08:44:44
3	SiO2†	51604.1	49260.1	10397 µg/L	10397 ppb	08:44:24
3	Si 251.611†	58129.1	57751.1	4844.0 µg/L	4844.0 ppb	08:44:24
3	Sn 189.927†	873.4	848.9	498.02 µg/L	498.02 ppb	08:44:44
3	Ti 334.940†	196455.0	195433.0	487.07 µg/L	487.07 ppb	08:44:18
3	Tl 190.801†	269.3	292.0	507.24 µg/L	507.24 ppb	08:44:44
3	U 409.014†	4691.2	4918.2	468.34 µg/L	468.34 ppb	08:44:24
3	V 292.402†	39656.9	39728.9	499.57 µg/L	499.57 ppb	08:44:24
3	Zn 213.857†	17789.3	17095.5	494.91 µg/L	494.91 ppb	08:44:24

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1955177.5	100.61	%	0.448				0.45%
Sc RADIAL	79011.2	103	%	0.3				0.26%
Y 371.029	1232502.0	100.30	%	0.413				0.41%
Ag 328.068†	27915.6	263.92	µg/L	3.977	263.92	ppb	3.977	1.51%
QC value within limits for Ag 328.068 Recovery = 105.57%								
Al 396.153Radial†	7290.1	5054.6	µg/L	23.74	5054.6	ppb	23.74	0.47%
QC value within limits for Al 396.153Radial Recovery = 101.09%								
As 188.979†	210.3	484.19	µg/L	31.773	484.19	ppb	31.773	6.56%
QC value within limits for As 188.979 Recovery = 96.84%								
B 249.677†	10648.1	516.20	µg/L	9.391	516.20	ppb	9.391	1.82%
QC value within limits for B 249.677 Recovery = 103.24%								
Ba 233.527†	17478.0	508.72	µg/L	13.734	508.72	ppb	13.734	2.70%
QC value within limits for Ba 233.527 Recovery = 101.74%								
Be 313.107†	377642.0	262.92	µg/L	5.049	262.92	ppb	5.049	1.92%
QC value within limits for Be 313.107 Recovery = 105.17%								
Ca 317.933Radial†	6208.7	4888.8	µg/L	19.18	4888.8	ppb	19.18	0.39%
QC value within limits for Ca 317.933Radial Recovery = 97.78%								
Cd 226.502†	17041.3	501.58	µg/L	14.811	501.58	ppb	14.811	2.95%
QC value within limits for Cd 226.502 Recovery = 100.32%								
Co 228.616†	9235.6	509.18	µg/L	17.313	509.18	ppb	17.313	3.40%

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   QC value within limits for Co 228.616  Recovery = 101.84%
Cr 267.716†          21113.5      490.04 µg/L        20.750      490.04 ppb        20.750   4.23%
   QC value within limits for Cr 267.716  Recovery = 98.01%
Cu 324.752†          67584.9      508.86 µg/L        15.451      508.86 ppb        15.451   3.04%
   QC value within limits for Cu 324.752  Recovery = 101.77%
Fe 238.204 Radial†     348.4      5012.7 µg/L         58.08      5012.7 ppb         58.08   1.16%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.25%
K 766.490 Radial†     3593.5      2385.5 µg/L         45.03      2385.5 ppb         45.03   1.89%
   QC value within limits for K 766.490 Radial  Recovery = 95.42%
Mg 279.077 IEC†        473.7      5166.6 µg/L         22.38      5166.6 ppb         22.38   0.43%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.33%
Mn 257.610†         136328.5      504.09 µg/L        16.433      504.09 ppb        16.433   3.26%
   QC value within limits for Mn 257.610  Recovery = 100.82%
Mo 202.031†          4215.7      529.69 µg/L        40.922      529.69 ppb        40.922   7.73%
   QC value within limits for Mo 202.031  Recovery = 105.94%
Na 589.592 Radial†   8437.4      2422.9 µg/L         12.88      2422.9 ppb         12.88   0.53%
   QC value within limits for Na 589.592 Radial  Recovery = 96.92%
Ni 231.604†          8018.8      504.69 µg/L        14.970      504.69 ppb        14.970   2.97%
   QC value within limits for Ni 231.604  Recovery = 100.94%
P 214.914†           1063.7      2498.4 µg/L        155.42      2498.4 ppb        155.42   6.22%
   QC value within limits for P 214.914  Recovery = 99.94%
Pb 220.353†          1729.9      504.72 µg/L        32.204      504.72 ppb        32.204   6.38%
   QC value within limits for Pb 220.353  Recovery = 100.94%
S 181.975 Axial†      444.3      2547.1 µg/L        136.70      2547.1 ppb        136.70   5.37%
   QC value within limits for S 181.975 Axial  Recovery = 101.89%
Sb 206.836†           464.7      517.14 µg/L        33.070      517.14 ppb        33.070   6.39%
   QC value within limits for Sb 206.836  Recovery = 103.43%
Se 196.026†          1657.9      2637.5 µg/L        134.43      2637.5 ppb        134.43   5.10%
   QC value within limits for Se 196.026  Recovery = 105.50%
SiO2†               50408.2       10640 µg/L         231.4       10640 ppb         231.4   2.18%
   QC value within limits for SiO2  Recovery = 99.48%
Si 251.611†         59089.5      4956.2 µg/L        107.13      4956.2 ppb        107.13   2.16%
   QC value within limits for Si 251.611  Recovery = 99.12%
Sn 189.927†           938.0      550.04 µg/L        45.048      550.04 ppb        45.048   8.19%
   QC value greater than the upper limit for Sn 189.927  Recovery = 110.01%
Sr 421.552†         82129.6      521.84 µg/L         2.526      521.84 ppb         2.526   0.48%
   QC value within limits for Sr 421.552  Recovery = 104.37%
Ti 334.940†        200010.9      498.49 µg/L        10.322      498.49 ppb        10.322   2.07%
   QC value within limits for Ti 334.940  Recovery = 99.70%
Tl 190.801†           309.1      536.75 µg/L        25.655      536.75 ppb        25.655   4.78%
   QC value within limits for Tl 190.801  Recovery = 107.35%
U 409.014†           5155.3      490.97 µg/L        19.636      490.97 ppb        19.636   4.00%
   QC value within limits for U 409.014  Recovery = 98.19%
V 292.402†          41307.4      519.64 µg/L        18.056      519.64 ppb        18.056   3.47%
   QC value within limits for V 292.402  Recovery = 103.93%
Zn 213.857†         17704.4      512.56 µg/L        16.261      512.56 ppb        16.261   3.17%
   QC value within limits for Zn 213.857  Recovery = 102.51%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/27/2010 08:44:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76272.5	76272.5	99.3	%			08:45:27
1	Al 396.153Radial†	-13.1	14.8	10.297	µg/L	10.297	ppb	08:45:27
1	Ca 317.933Radial†	247.1	-2.8	-2.2023	µg/L	-2.2023	ppb	08:45:48
1	Fe 238.204 Radial†	17.7	2.0	28.631	µg/L	28.631	ppb	08:45:48
1	K 766.490 Radial†	412.5	3.5	2.2982	µg/L	2.2982	ppb	08:45:27
1	Mg 279.077 IEC†	9.1	0.9	9.3798	µg/L	9.3798	ppb	08:45:48
1	Na 589.592 Radial†	513.4	-27.9	-8.0070	µg/L	-8.0070	ppb	08:45:27
1	Sr 421.552†	549.3	-4.4	-0.0282	µg/L	-0.0282	ppb	08:45:27
1	Sc 361.383	1932739.5	1932739.5	99.452	%			08:46:49
1	Y 371.029	1222269.0	1222269.0	99.469	%			08:46:49
1	Ag 328.068†	15.1	70.3	0.6630	µg/L	0.6630	ppb	08:46:55
1	As 188.979†	-4.4	-5.0	-11.501	µg/L	-11.501	ppb	08:47:16
1	B 249.677†	149.7	35.3	1.7032	µg/L	1.7032	ppb	08:47:16
1	Ba 233.527†	-16.8	-2.3	-0.0663	µg/L	-0.0663	ppb	08:47:16
1	Be 313.107†	3913.2	95.4	0.0664	µg/L	0.0664	ppb	08:46:55
1	Cd 226.502†	-133.6	1.1	0.0293	µg/L	0.0293	ppb	08:47:16
1	Co 228.616†	-46.6	-1.9	-0.1045	µg/L	-0.1045	ppb	08:47:16
1	Cr 267.716†	-83.7	-1.3	-0.0307	µg/L	-0.0307	ppb	08:47:16
1	Cu 324.752†	3718.2	70.5	0.5342	µg/L	0.5342	ppb	08:46:55
1	Mn 257.610†	-208.7	-20.3	-0.0717	µg/L	-0.0717	ppb	08:47:16
1	Mo 202.031†	13.8	-3.3	-0.4165	µg/L	-0.4165	ppb	08:47:16
1	Ni 231.604†	340.7	7.1	0.4493	µg/L	0.4493	ppb	08:47:16
1	P 214.914†	202.8	1.5	3.4199	µg/L	3.4199	ppb	08:47:16
1	Pb 220.353†	53.2	-2.4	-0.7088	µg/L	-0.7088	ppb	08:47:16
1	S 181.975 Axial†	22.0	-3.3	-19.173	µg/L	-19.173	ppb	08:47:16
1	Sb 206.836†	26.0	3.8	4.1744	µg/L	4.1744	ppb	08:47:16
1	Se 196.026†	6.3	-6.1	-9.4570	µg/L	-9.4570	ppb	08:47:16
1	SiO2†	2238.0	-28.4	-5.9985	µg/L	-5.9985	ppb	08:46:55
1	Si 251.611†	276.6	-26.4	-2.2168	µg/L	-2.2168	ppb	08:47:16
1	Sn 189.927†	21.6	-1.7	-0.9635	µg/L	-0.9635	ppb	08:47:16
1	Ti 334.940†	831.0	61.9	0.1536	µg/L	0.1536	ppb	08:46:55
1	Tl 190.801†	-22.6	0.3	0.5619	µg/L	0.5619	ppb	08:47:16
1	U 409.014†	-266.3	-34.8	-3.3206	µg/L	-3.3206	ppb	08:46:55
1	V 292.402†	-45.3	76.6	0.9468	µg/L	0.9468	ppb	08:46:55
1	Zn 213.857†	653.0	-14.7	-0.4346	µg/L	-0.4346	ppb	08:47:16
2	Sc RADIAL	76116.0	76116.0	99.1	%			08:45:53
2	Al 396.153Radial†	-56.7	-29.3	-20.333	µg/L	-20.333	ppb	08:45:53
2	Ca 317.933Radial†	256.1	6.8	5.3936	µg/L	5.3936	ppb	08:46:13
2	Fe 238.204 Radial†	17.2	1.5	21.461	µg/L	21.461	ppb	08:46:13
2	K 766.490 Radial†	414.5	6.3	4.2139	µg/L	4.2139	ppb	08:45:53
2	Mg 279.077 IEC†	9.1	0.9	9.2493	µg/L	9.2493	ppb	08:46:13
2	Na 589.592 Radial†	502.7	-37.5	-10.780	µg/L	-10.780	ppb	08:45:53
2	Sr 421.552†	571.9	19.5	0.1240	µg/L	0.1240	ppb	08:45:53
2	Sc 361.383	1945577.1	1945577.1	100.11	%			08:47:22
2	Y 371.029	1230330.5	1230330.5	100.12	%			08:47:22
2	Ag 328.068†	-77.9	-22.8	-0.2031	µg/L	-0.2031	ppb	08:47:27
2	As 188.979†	-2.9	-3.4	-7.9485	µg/L	-7.9485	ppb	08:47:48
2	B 249.677†	149.1	33.7	1.6283	µg/L	1.6283	ppb	08:47:48
2	Ba 233.527†	-18.7	-4.1	-0.1174	µg/L	-0.1174	ppb	08:47:48
2	Be 313.107†	3940.2	96.3	0.0671	µg/L	0.0671	ppb	08:47:27
2	Cd 226.502†	-134.0	1.7	0.0466	µg/L	0.0466	ppb	08:47:48
2	Co 228.616†	-43.2	1.8	0.0991	µg/L	0.0991	ppb	08:47:48
2	Cr 267.716†	-78.8	4.1	0.0961	µg/L	0.0961	ppb	08:47:48
2	Cu 324.752†	3700.6	28.2	0.2151	µg/L	0.2151	ppb	08:47:27
2	Mn 257.610†	-198.9	-9.2	-0.0315	µg/L	-0.0315	ppb	08:47:48
2	Mo 202.031†	11.9	-5.3	-0.6609	µg/L	-0.6609	ppb	08:47:48
2	Ni 231.604†	341.6	5.8	0.3658	µg/L	0.3658	ppb	08:47:48
2	P 214.914†	212.1	9.3	22.261	µg/L	22.261	ppb	08:47:48
2	Pb 220.353†	50.9	-5.0	-1.4730	µg/L	-1.4730	ppb	08:47:48

2	S 181.975 Axial†	21.9	-3.6	-20.597 µg/L	-20.597 ppb	08:47:48
2	Sb 206.836†	31.3	8.9	9.8324 µg/L	9.8324 ppb	08:47:48
2	Se 196.026†	8.9	-3.6	-5.5505 µg/L	-5.5505 ppb	08:47:48
2	SiO2†	2241.4	-39.9	-8.4261 µg/L	-8.4261 ppb	08:47:27
2	Si 251.611†	290.3	-14.5	-1.2161 µg/L	-1.2161 ppb	08:47:48
2	Sn 189.927†	20.4	-3.0	-1.7600 µg/L	-1.7600 ppb	08:47:48
2	Ti 334.940†	850.9	76.3	0.1897 µg/L	0.1897 ppb	08:47:27
2	Tl 190.801†	-16.7	6.4	10.960 µg/L	10.960 ppb	08:47:48
2	U 409.014†	-272.0	-38.8	-3.7016 µg/L	-3.7016 ppb	08:47:27
2	V 292.402†	-28.8	93.3	1.1529 µg/L	1.1529 ppb	08:47:27
2	Zn 213.857†	656.7	-15.3	-0.4505 µg/L	-0.4505 ppb	08:47:48
3	Sc RADIAL	76125.8	76125.8	99.1 %		08:46:19
3	Al 396.153Radial†	-20.8	7.0	4.8595 µg/L	4.8595 ppb	08:46:19
3	Ca 317.933Radial†	246.8	-2.6	-2.0738 µg/L	-2.0738 ppb	08:46:39
3	Fe 238.204 Radial†	16.8	1.1	15.977 µg/L	15.977 ppb	08:46:39
3	K 766.490 Radial†	398.3	-10.0	-6.6694 µg/L	-6.6694 ppb	08:46:19
3	Mg 279.077 IEC†	9.2	1.0	10.679 µg/L	10.679 ppb	08:46:39
3	Na 589.592 Radial†	477.9	-62.7	-18.004 µg/L	-18.004 ppb	08:46:19
3	Sr 421.552†	577.3	24.9	0.1581 µg/L	0.1581 ppb	08:46:19
3	Sc 361.383	1954667.6	1954667.6	100.58 %		08:47:54
3	Y 371.029	1236383.9	1236383.9	100.62 %		08:47:54
3	Ag 328.068†	-7.2	48.0	0.4462 µg/L	0.4462 ppb	08:47:59
3	As 188.979†	-1.5	-2.0	-4.6372 µg/L	-4.6372 ppb	08:48:20
3	B 249.677†	136.6	20.7	0.9963 µg/L	0.9963 ppb	08:48:20
3	Ba 233.527†	-23.5	-8.9	-0.2585 µg/L	-0.2585 ppb	08:48:20
3	Be 313.107†	3924.8	62.7	0.0436 µg/L	0.0436 ppb	08:47:59
3	Cd 226.502†	-131.9	4.4	0.1263 µg/L	0.1263 ppb	08:48:20
3	Co 228.616†	-40.5	4.8	0.2627 µg/L	0.2627 ppb	08:48:20
3	Cr 267.716†	-86.8	-3.5	-0.0824 µg/L	-0.0824 ppb	08:48:20
3	Cu 324.752†	3699.9	10.4	0.0802 µg/L	0.0802 ppb	08:47:59
3	Mn 257.610†	-206.1	-15.4	-0.0552 µg/L	-0.0552 ppb	08:48:20
3	Mo 202.031†	20.2	2.9	0.3634 µg/L	0.3634 ppb	08:48:20
3	Ni 231.604†	333.6	-3.8	-0.2387 µg/L	-0.2387 ppb	08:48:20
3	P 214.914†	202.7	-0.9	-2.1992 µg/L	-2.1992 ppb	08:48:20
3	Pb 220.353†	58.2	2.0	0.5767 µg/L	0.5767 ppb	08:48:20
3	S 181.975 Axial†	23.0	-2.6	-15.141 µg/L	-15.141 ppb	08:48:20
3	Sb 206.836†	25.2	2.7	2.9740 µg/L	2.9740 ppb	08:48:20
3	Se 196.026†	8.9	-3.6	-5.6183 µg/L	-5.6183 ppb	08:48:20
3	SiO2†	2234.6	-57.1	-12.049 µg/L	-12.049 ppb	08:47:59
3	Si 251.611†	300.6	-5.7	-0.4770 µg/L	-0.4770 ppb	08:48:20
3	Sn 189.927†	23.6	0.0	0.0229 µg/L	0.0229 ppb	08:48:20
3	Ti 334.940†	862.6	83.9	0.2085 µg/L	0.2085 ppb	08:47:59
3	Tl 190.801†	-21.1	2.1	3.5533 µg/L	3.5533 ppb	08:48:20
3	U 409.014†	-241.6	-7.3	-0.6965 µg/L	-0.6965 ppb	08:47:59
3	V 292.402†	-144.6	-21.6	-0.2661 µg/L	-0.2661 ppb	08:47:59
3	Zn 213.857†	653.4	-21.6	-0.6314 µg/L	-0.6314 ppb	08:48:20

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1944328.1	100.05	%	0.567				0.57%
Sc RADIAL	76171.4	99.2	%	0.11				0.12%
Y 371.029	1229661.2	100.07	%	0.576				0.58%
Ag 328.068†	31.8	0.3020	µg/L	0.45069	0.3020	ppb	0.45069	149.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.5	-1.7253	µg/L	16.34232	-1.7253	ppb	16.34232	947.24%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.5	-8.0290	µg/L	3.43269	-8.0290	ppb	3.43269	42.75%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	29.9	1.4426	µg/L	0.38827	1.4426	ppb	0.38827	26.91%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.1	-0.1474	µg/L	0.09952	-0.1474	ppb	0.09952	67.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	84.8	0.0590	µg/L	0.01335	0.0590	ppb	0.01335	22.61%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.5	0.3725	µg/L	4.34886	0.3725	ppb	4.34886	>999.9%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.4	0.0674	µg/L	0.05172	0.0674	ppb	0.05172	76.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.6	0.0858	µg/L	0.18395	0.0858	ppb	0.18395	214.45%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -0.3     -0.0057 µg/L      0.09184     -0.0057 ppb       0.09184 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              36.4      0.2765 µg/L      0.23316      0.2765 ppb       0.23316  84.32%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.5      22.023 µg/L       6.3456      22.023 ppb        6.3456  28.81%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -0.1     -0.0524 µg/L      5.80999     -0.0524 ppb       5.80999 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.9      9.7694 µg/L      0.79048      9.7694 ppb       0.79048   8.09%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -15.0     -0.0528 µg/L      0.02022     -0.0528 ppb       0.02022  38.28%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -1.9     -0.2380 µg/L      0.53496     -0.2380 ppb       0.53496 224.76%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -42.7     -12.264 µg/L       5.1608     -12.264 ppb        5.1608  42.08%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               3.0      0.1921 µg/L      0.37548      0.1921 ppb       0.37548 195.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                3.3      7.8274 µg/L     12.81216      7.8274 ppb      12.81216 163.68%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -1.8     -0.5350 µg/L      1.03587     -0.5350 ppb       1.03587 193.61%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -3.2     -18.304 µg/L       2.8301     -18.304 ppb        2.8301  15.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               5.1      5.6603 µg/L      3.66265      5.6603 ppb       3.66265  64.71%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -4.4     -6.8753 µg/L      2.23608     -6.8753 ppb       2.23608  32.52%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -41.8     -8.8245 µg/L      3.04473     -8.8245 ppb       3.04473  34.50%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             -15.5     -1.3033 µg/L      0.87315     -1.3033 ppb       0.87315  66.99%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.5     -0.9002 µg/L      0.89313     -0.9002 ppb       0.89313  99.22%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              13.3      0.0846 µg/L      0.09916      0.0846 ppb       0.09916 117.19%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              74.1      0.1839 µg/L      0.02788      0.1839 ppb       0.02788  15.16%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.9      5.0249 µg/L      5.35276      5.0249 ppb       5.35276 106.52%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -26.9     -2.5729 µg/L      1.63615     -2.5729 ppb       1.63615  63.59%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               49.4      0.6112 µg/L      0.76676      0.6112 ppb       0.76676 125.45%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -17.2     -0.5055 µg/L      0.10937     -0.5055 ppb       0.10937  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 1/27/2010 08:48:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75969.0	75969.0	98.9	%			08:49:02
1	Al 396.153Radial†	284.1	315.2	218.83	µg/L	218.83	ppb	08:49:02
1	Ca 317.933Radial†	508.4	262.4	206.61	µg/L	206.61	ppb	08:49:23
1	Fe 238.204 Radial†	24.8	9.2	131.62	µg/L	131.62	ppb	08:49:23
1	K 766.490 Radial†	695.7	291.5	193.53	µg/L	193.53	ppb	08:49:02
1	Mg 279.077 IEC†	40.9	33.0	359.75	µg/L	359.75	ppb	08:49:23
1	Na 589.592 Radial†	1539.5	1011.8	290.57	µg/L	290.57	ppb	08:49:02
1	Sr 421.552†	1385.7	843.5	5.3594	µg/L	5.3594	ppb	08:49:02
1	Sc 361.383	1920691.4	1920691.4	98.832	%			08:50:25
1	Y 371.029	1215717.6	1215717.6	98.935	%			08:50:25
1	Ag 328.068†	523.2	584.5	5.4898	µg/L	5.4898	ppb	08:50:30
1	As 188.979†	14.8	14.4	33.192	µg/L	33.192	ppb	08:50:51
1	B 249.677†	1201.0	1100.0	53.454	µg/L	53.454	ppb	08:50:30
1	Ba 233.527†	169.0	185.5	5.3985	µg/L	5.3985	ppb	08:50:51
1	Be 313.107†	11380.8	7675.9	5.3458	µg/L	5.3458	ppb	08:50:30
1	Cd 226.502†	45.3	181.2	5.3266	µg/L	5.3266	ppb	08:50:51
1	Co 228.616†	53.2	98.9	5.4552	µg/L	5.4552	ppb	08:50:51
1	Cr 267.716†	144.2	228.7	5.3079	µg/L	5.3079	ppb	08:50:30
1	Cu 324.752†	5183.3	1576.4	11.871	µg/L	11.871	ppb	08:50:30
1	Mn 257.610†	2726.8	2948.5	10.896	µg/L	10.896	ppb	08:50:30
1	Mo 202.031†	94.6	78.5	9.8709	µg/L	9.8709	ppb	08:50:51
1	Ni 231.604†	426.4	96.0	6.0428	µg/L	6.0428	ppb	08:50:51
1	P 214.914†	273.6	74.3	176.85	µg/L	176.85	ppb	08:50:51
1	Pb 220.353†	88.5	33.6	9.7587	µg/L	9.7587	ppb	08:50:51
1	S 181.975 Axial†	40.3	15.3	87.637	µg/L	87.637	ppb	08:50:51
1	Sb 206.836†	30.7	8.6	9.6382	µg/L	9.6382	ppb	08:50:51
1	Se 196.026†	31.0	18.9	30.314	µg/L	30.314	ppb	08:50:51
1	SiO2†	3342.1	1102.9	232.79	µg/L	232.79	ppb	08:50:30
1	Si 251.611†	1546.9	1260.7	105.74	µg/L	105.74	ppb	08:50:51
1	Sn 189.927†	44.5	21.6	12.728	µg/L	12.728	ppb	08:50:51
1	Ti 334.940†	2926.6	2187.5	5.4304	µg/L	5.4304	ppb	08:50:30
1	Tl 190.801†	-12.4	10.5	18.254	µg/L	18.254	ppb	08:50:51
1	U 409.014†	359.3	596.6	56.898	µg/L	56.898	ppb	08:50:30
1	V 292.402†	277.4	402.8	5.1635	µg/L	5.1635	ppb	08:50:30
1	Zn 213.857†	1016.3	357.0	10.334	µg/L	10.334	ppb	08:50:51
2	Sc RADIAL	76669.6	76669.6	99.8	%			08:49:28
2	Al 396.153Radial†	270.5	299.0	207.53	µg/L	207.53	ppb	08:49:28
2	Ca 317.933Radial†	506.1	255.4	201.14	µg/L	201.14	ppb	08:49:48
2	Fe 238.204 Radial†	25.1	9.3	132.93	µg/L	132.93	ppb	08:49:48
2	K 766.490 Radial†	726.2	315.6	209.53	µg/L	209.53	ppb	08:49:28
2	Mg 279.077 IEC†	41.3	33.1	360.96	µg/L	360.96	ppb	08:49:48
2	Na 589.592 Radial†	1567.3	1025.4	294.47	µg/L	294.47	ppb	08:49:28
2	Sr 421.552†	1408.3	853.3	5.4220	µg/L	5.4220	ppb	08:49:28
2	Sc 361.383	1942858.2	1942858.2	99.972	%			08:50:57
2	Y 371.029	1228778.5	1228778.5	99.998	%			08:50:57
2	Ag 328.068†	515.6	570.9	5.3622	µg/L	5.3622	ppb	08:51:02
2	As 188.979†	13.0	12.5	28.728	µg/L	28.728	ppb	08:51:23
2	B 249.677†	1181.2	1066.3	51.817	µg/L	51.817	ppb	08:51:02
2	Ba 233.527†	159.2	173.8	5.0578	µg/L	5.0578	ppb	08:51:23
2	Be 313.107†	11317.2	7480.9	5.2101	µg/L	5.2101	ppb	08:51:02
2	Cd 226.502†	39.2	174.7	5.1334	µg/L	5.1334	ppb	08:51:23
2	Co 228.616†	50.5	95.5	5.2692	µg/L	5.2692	ppb	08:51:23
2	Cr 267.716†	154.5	237.4	5.5086	µg/L	5.5086	ppb	08:51:02
2	Cu 324.752†	5135.5	1468.7	11.062	µg/L	11.062	ppb	08:51:02
2	Mn 257.610†	2706.3	2896.5	10.704	µg/L	10.704	ppb	08:51:02
2	Mo 202.031†	102.2	85.1	10.689	µg/L	10.689	ppb	08:51:23
2	Ni 231.604†	418.9	83.6	5.2625	µg/L	5.2625	ppb	08:51:23
2	P 214.914†	261.2	58.8	139.68	µg/L	139.68	ppb	08:51:23
2	Pb 220.353†	85.6	29.7	8.6225	µg/L	8.6225	ppb	08:51:23

2	S 181.975 Axial†	40.3	14.8	84.873 µg/L	84.873 ppb	08:51:23
2	Sb 206.836†	30.6	8.2	9.1533 µg/L	9.1533 ppb	08:51:23
2	Se 196.026†	32.4	20.0	32.030 µg/L	32.030 ppb	08:51:23
2	SiO2†	3373.7	1095.9	231.32 µg/L	231.32 ppb	08:51:02
2	Si 251.611†	1536.0	1231.9	103.33 µg/L	103.33 ppb	08:51:23
2	Sn 189.927†	42.0	18.6	10.999 µg/L	10.999 ppb	08:51:23
2	Ti 334.940†	2871.7	2098.8	5.2091 µg/L	5.2091 ppb	08:51:02
2	Tl 190.801†	-6.3	16.7	28.951 µg/L	28.951 ppb	08:51:23
2	U 409.014†	344.6	577.7	55.095 µg/L	55.095 ppb	08:51:02
2	V 292.402†	274.1	396.4	5.0880 µg/L	5.0880 ppb	08:51:02
2	Zn 213.857†	1035.3	364.2	10.551 µg/L	10.551 ppb	08:51:23
3	Sc RADIAL	76397.8	76397.8	99.5 %		08:49:54
3	Al 396.153Radial†	273.3	302.8	210.20 µg/L	210.20 ppb	08:49:54
3	Ca 317.933Radial†	513.2	264.3	208.15 µg/L	208.15 ppb	08:50:14
3	Fe 238.204 Radial†	24.9	9.2	132.00 µg/L	132.00 ppb	08:50:14
3	K 766.490 Radial†	689.9	281.7	186.99 µg/L	186.99 ppb	08:49:54
3	Mg 279.077 IEC†	41.2	33.1	361.06 µg/L	361.06 ppb	08:50:14
3	Na 589.592 Radial†	1558.3	1022.0	293.47 µg/L	293.47 ppb	08:49:54
3	Sr 421.552†	1413.6	863.8	5.4882 µg/L	5.4882 ppb	08:49:54
3	Sc 361.383	1966248.1	1966248.1	101.18 %		08:51:29
3	Y 371.029	1243520.0	1243520.0	101.20 %		08:51:29
3	Ag 328.068†	476.5	526.0	4.9415 µg/L	4.9415 ppb	08:51:35
3	As 188.979†	10.5	9.8	22.626 µg/L	22.626 ppb	08:51:55
3	B 249.677†	1143.8	1015.3	49.332 µg/L	49.332 ppb	08:51:35
3	Ba 233.527†	140.1	153.0	4.4540 µg/L	4.4540 ppb	08:51:55
3	Be 313.107†	10897.5	6931.4	4.8274 µg/L	4.8274 ppb	08:51:35
3	Cd 226.502†	29.3	164.4	4.8298 µg/L	4.8298 ppb	08:51:55
3	Co 228.616†	39.0	83.5	4.6079 µg/L	4.6079 ppb	08:51:55
3	Cr 267.716†	138.7	219.9	5.1029 µg/L	5.1029 ppb	08:51:35
3	Cu 324.752†	5083.7	1356.4	10.217 µg/L	10.217 ppb	08:51:35
3	Mn 257.610†	2554.6	2714.4	10.031 µg/L	10.031 ppb	08:51:35
3	Mo 202.031†	85.9	67.7	8.5123 µg/L	8.5123 ppb	08:51:55
3	Ni 231.604†	425.1	84.8	5.3370 µg/L	5.3370 ppb	08:51:55
3	P 214.914†	270.6	64.9	154.48 µg/L	154.48 ppb	08:51:55
3	Pb 220.353†	90.8	33.8	9.8176 µg/L	9.8176 ppb	08:51:55
3	S 181.975 Axial†	39.8	13.8	79.056 µg/L	79.056 ppb	08:51:55
3	Sb 206.836†	33.5	10.7	11.943 µg/L	11.943 ppb	08:51:55
3	Se 196.026†	24.1	11.4	18.456 µg/L	18.456 ppb	08:51:55
3	SiO2†	3335.8	1018.3	214.93 µg/L	214.93 ppb	08:51:35
3	Si 251.611†	1393.7	1073.0	89.998 µg/L	89.998 ppb	08:51:55
3	Sn 189.927†	41.3	17.4	10.259 µg/L	10.259 ppb	08:51:55
3	Ti 334.940†	2746.0	1940.4	4.8141 µg/L	4.8141 ppb	08:51:35
3	Tl 190.801†	-11.5	11.7	20.227 µg/L	20.227 ppb	08:51:55
3	U 409.014†	278.4	508.2	48.463 µg/L	48.463 ppb	08:51:35
3	V 292.402†	247.2	366.5	4.6922 µg/L	4.6922 ppb	08:51:35
3	Zn 213.857†	990.1	307.3	8.8916 µg/L	8.8916 ppb	08:51:55

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1943265.9	99.993	%	1.1722				1.17%
Sc RADIAL	76345.5	99.4	%	0.46				0.46%
Y 371.029	1229338.7	100.04	%	1.132				1.13%
Ag 328.068†	560.5	5.2645	µg/L	0.28690	5.2645	ppb	0.28690	5.45%
QC value within limits for Ag 328.068 Recovery = 105.29%								
Al 396.153Radial†	305.7	212.19	µg/L	5.906	212.19	ppb	5.906	2.78%
QC value within limits for Al 396.153Radial Recovery = 106.09%								
As 188.979†	12.2	28.182	µg/L	5.3038	28.182	ppb	5.3038	18.82%
QC value within limits for As 188.979 Recovery = 93.94%								
B 249.677†	1060.5	51.534	µg/L	2.0751	51.534	ppb	2.0751	4.03%
QC value within limits for B 249.677 Recovery = 103.07%								
Ba 233.527†	170.8	4.9701	µg/L	0.47834	4.9701	ppb	0.47834	9.62%
QC value within limits for Ba 233.527 Recovery = 99.40%								
Be 313.107†	7362.7	5.1277	µg/L	0.26883	5.1277	ppb	0.26883	5.24%
QC value within limits for Be 313.107 Recovery = 102.55%								
Ca 317.933Radial†	260.7	205.30	µg/L	3.686	205.30	ppb	3.686	1.80%
QC value within limits for Ca 317.933Radial Recovery = 102.65%								
Cd 226.502†	173.5	5.0966	µg/L	0.25045	5.0966	ppb	0.25045	4.91%
QC value within limits for Cd 226.502 Recovery = 101.93%								
Co 228.616†	92.6	5.1108	µg/L	0.44533	5.1108	ppb	0.44533	8.71%

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   QC value within limits for Co 228.616  Recovery = 102.22%
Cr 267.716†              228.7      5.3065 µg/L       0.20282      5.3065 ppb        0.20282   3.82%
   QC value within limits for Cr 267.716  Recovery = 106.13%
Cu 324.752†             1467.2      11.050 µg/L        0.8271      11.050 ppb         0.8271   7.48%
   QC value within limits for Cu 324.752  Recovery = 110.50%
Fe 238.204 Radial†        9.2      132.18 µg/L         0.674      132.18 ppb          0.674   0.51%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 132.18%
K 766.490 Radial†        296.3      196.68 µg/L        11.596      196.68 ppb         11.596   5.90%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = 131.12%
Mg 279.077 IEC†           33.1      360.59 µg/L         0.729      360.59 ppb          0.729   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 120.20%
Mn 257.610†             2853.1      10.543 µg/L        0.4543      10.543 ppb         0.4543   4.31%
   QC value within limits for Mn 257.610  Recovery = 105.43%
Mo 202.031†               77.1      9.6907 µg/L       1.09946      9.6907 ppb        1.09946  11.35%
   QC value within limits for Mo 202.031  Recovery = 96.91%
Na 589.592 Radial†      1019.7      292.83 µg/L         2.026      292.83 ppb          2.026   0.69%
   QC value within limits for Na 589.592 Radial  Recovery = 97.61%
Ni 231.604†               88.1      5.5474 µg/L       0.43065      5.5474 ppb        0.43065   7.76%
   QC value within limits for Ni 231.604  Recovery = 110.95%
P 214.914†                66.0      157.01 µg/L        18.713      157.01 ppb         18.713  11.92%
   QC value within limits for P 214.914  Recovery = 104.67%
Pb 220.353†               32.4      9.3996 µg/L       0.67368      9.3996 ppb        0.67368   7.17%
   QC value within limits for Pb 220.353  Recovery = 94.00%
S 181.975 Axial†          14.6      83.855 µg/L        4.3804      83.855 ppb         4.3804   5.22%
   QC value within limits for S 181.975 Axial  Recovery = 83.86%
Sb 206.836†                9.2      10.245 µg/L        1.4907      10.245 ppb         1.4907  14.55%
   QC value within limits for Sb 206.836  Recovery = 102.45%
Se 196.026†               16.8      26.933 µg/L        7.3916      26.933 ppb         7.3916  27.44%
   QC value within limits for Se 196.026  Recovery = 89.78%
SiO2†                   1072.4      226.34 µg/L         9.910      226.34 ppb          9.910   4.38%
   QC value within limits for SiO2  Recovery = 106.27%
Si 251.611†             1188.5      99.690 µg/L        8.4802      99.690 ppb         8.4802   8.51%
   QC value within limits for Si 251.611  Recovery = 99.69%
Sn 189.927†               19.2      11.329 µg/L        1.2674      11.329 ppb         1.2674  11.19%
   QC value within limits for Sn 189.927  Recovery = 113.29%
Sr 421.552†              853.5      5.4232 µg/L       0.06441      5.4232 ppb        0.06441   1.19%
   QC value within limits for Sr 421.552  Recovery = 108.46%
Ti 334.940†             2075.6      5.1512 µg/L       0.31221      5.1512 ppb        0.31221   6.06%
   QC value within limits for Ti 334.940  Recovery = 103.02%
Tl 190.801†               13.0      22.477 µg/L        5.6921      22.477 ppb         5.6921  25.32%
   QC value within limits for Tl 190.801  Recovery = 112.39%
U 409.014†               560.8      53.485 µg/L        4.4418      53.485 ppb         4.4418   8.30%
   QC value within limits for U 409.014  Recovery = 106.97%
V 292.402†               388.6      4.9813 µg/L       0.25313      4.9813 ppb        0.25313   5.08%
   QC value within limits for V 292.402  Recovery = 99.63%
Zn 213.857†              342.8      9.9256 µg/L       0.90197      9.9256 ppb        0.90197   9.09%
   QC value within limits for Zn 213.857  Recovery = 99.26%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 1/27/2010 08:52:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75848.6	75848.6	98.7	%			08:52:46
1	Al 396.153Radial†	743409.2	752954.5	523190	µg/L	523190	ppb	08:52:41
1	Ca 317.933Radial†	627835.4	635621.5	500500	µg/L	500500	ppb	08:52:41
1	Fe 238.204 Radial†	13383.6	13539.1	194370	µg/L	194370	ppb	08:52:46
1	K 766.490 Radial†	273.1	-135.4	-89.877	µg/L	-89.877	ppb	08:52:46
1	Mg 279.077 IEC†	45554.9	46129.8	502540	µg/L	502540	ppb	08:52:46
1	Na 589.592 Radial†	534.4	-3.7	-1.0722	µg/L	-1.0722	ppb	08:52:46
1	Sr 421.552†	1115.2	571.8	3.6330	µg/L	3.6330	ppb	08:52:46
1	Sc 361.383	1842815.0	1842815.0	94.825	%			08:53:19
1	Y 371.029	1151480.8	1151480.8	93.708	%			08:53:19
1	Ag 328.068†	-1958.6	-2010.5	-6.5603	µg/L	-6.5603	ppb	08:53:25
1	As 188.979†	-4.2	-5.0	-26.252	µg/L	-26.252	ppb	08:53:45
1	B 249.677†	2198.8	2203.6	5.7787	µg/L	5.7787	ppb	08:53:25
1	Ba 233.527†	216.2	242.5	7.0287	µg/L	7.0287	ppb	08:53:45
1	Be 313.107†	3026.4	-647.8	-0.4614	µg/L	-0.4614	ppb	08:53:25
1	Cd 226.502†	652.8	823.9	2.2875	µg/L	2.2875	ppb	08:53:45
1	Co 228.616†	6.9	52.3	2.8185	µg/L	2.8185	ppb	08:53:45
1	Cr 267.716†	-96.3	-18.8	-0.4422	µg/L	-0.4422	ppb	08:53:45
1	Cu 324.752†	649.1	-2983.7	4.5838	µg/L	4.5838	ppb	08:53:25
1	Mn 257.610†	-2413.4	-2355.6	-2.9607	µg/L	-2.9607	ppb	08:53:25
1	Mo 202.031†	-97.5	-120.0	-7.6844	µg/L	-7.6844	ppb	08:53:45
1	Ni 231.604†	299.6	-19.5	1.2960	µg/L	1.2960	ppb	08:53:45
1	P 214.914†	219.1	28.6	60.325	µg/L	60.325	ppb	08:53:45
1	Pb 220.353†	-50.2	-108.9	-10.372	µg/L	-10.372	ppb	08:53:45
1	S 181.975 Axial†	65.3	43.3	248.28	µg/L	248.28	ppb	08:53:45
1	Sb 206.836†	69.8	51.2	23.392	µg/L	23.392	ppb	08:53:45
1	Se 196.026†	-411.1	-446.0	-41.561	µg/L	-41.561	ppb	08:53:45
1	SiO2†	2012.3	-156.6	-33.054	µg/L	-33.054	ppb	08:53:45
1	Si 251.611†	367.8	83.4	6.9913	µg/L	6.9913	ppb	08:53:45
1	Sn 189.927†	-341.0	-383.0	1.4798	µg/L	1.4798	ppb	08:53:45
1	Ti 334.940†	10736.9	10549.2	-5.3996	µg/L	-5.3996	ppb	08:53:25
1	Tl 190.801†	13.0	36.8	-24.150	µg/L	-24.150	ppb	08:53:45
1	U 409.014†	-158.7	65.6	-51.285	µg/L	-51.285	ppb	08:53:25
1	V 292.402†	-870.0	-795.4	0.3009	µg/L	0.3009	ppb	08:53:25
1	Zn 213.857†	1829.7	1258.2	-1.0154	µg/L	-1.0154	ppb	08:53:45
2	Sc RADIAL	75933.8	75933.8	98.8	%			08:52:58
2	Al 396.153Radial†	745925.5	754655.4	524370	µg/L	524370	ppb	08:52:52
2	Ca 317.933Radial†	631047.6	638157.7	502500	µg/L	502500	ppb	08:52:52
2	Fe 238.204 Radial†	13362.2	13502.2	193840	µg/L	193840	ppb	08:52:58
2	K 766.490 Radial†	326.0	-82.2	-54.543	µg/L	-54.543	ppb	08:52:58
2	Mg 279.077 IEC†	45695.9	46220.7	503530	µg/L	503530	ppb	08:52:58
2	Na 589.592 Radial†	584.8	46.7	13.412	µg/L	13.412	ppb	08:52:58
2	Sr 421.552†	1086.5	541.5	3.4408	µg/L	3.4408	ppb	08:52:58
2	Sc 361.383	1836647.0	1836647.0	94.507	%			08:53:51
2	Y 371.029	1147565.3	1147565.3	93.389	%			08:53:51
2	Ag 328.068†	-1924.9	-1981.7	-6.3229	µg/L	-6.3229	ppb	08:53:57
2	As 188.979†	-9.0	-10.0	-38.024	µg/L	-38.024	ppb	08:54:17
2	B 249.677†	2209.5	2222.7	6.9865	µg/L	6.9865	ppb	08:53:57
2	Ba 233.527†	211.0	237.8	6.8922	µg/L	6.8922	ppb	08:54:17
2	Be 313.107†	3053.4	-608.6	-0.4341	µg/L	-0.4341	ppb	08:53:57
2	Cd 226.502†	660.3	834.2	2.6503	µg/L	2.6503	ppb	08:54:17
2	Co 228.616†	-12.4	31.9	1.6913	µg/L	1.6913	ppb	08:54:17
2	Cr 267.716†	-131.3	-56.1	-1.3080	µg/L	-1.3080	ppb	08:54:17
2	Cu 324.752†	587.9	-3046.1	4.0407	µg/L	4.0407	ppb	08:53:57
2	Mn 257.610†	-2432.7	-2384.6	-3.1778	µg/L	-3.1778	ppb	08:53:57
2	Mo 202.031†	-89.4	-111.8	-6.6753	µg/L	-6.6753	ppb	08:54:17
2	Ni 231.604†	297.8	-20.3	1.2393	µg/L	1.2393	ppb	08:54:17
2	P 214.914†	218.0	28.2	60.382	µg/L	60.382	ppb	08:54:17
2	Pb 220.353†	-46.1	-104.7	-9.0869	µg/L	-9.0869	ppb	08:54:17

2	S 181.975 Axial†	61.6	39.6	227.17 µg/L	227.17 ppb	08:54:17
2	Sb 206.836†	62.1	43.3	14.568 µg/L	14.568 ppb	08:54:17
2	Se 196.026†	-420.6	-457.4	-61.589 µg/L	-61.589 ppb	08:54:17
2	SiO2†	2008.5	-153.6	-32.412 µg/L	-32.412 ppb	08:54:17
2	Si 251.611†	386.0	104.0	8.7216 µg/L	8.7216 ppb	08:54:17
2	Sn 189.927†	-333.1	-375.9	6.2047 µg/L	6.2047 ppb	08:54:17
2	Ti 334.940†	10742.6	10593.3	-5.3360 µg/L	-5.3360 ppb	08:53:57
2	Tl 190.801†	10.4	34.1	-29.066 µg/L	-29.066 ppb	08:54:17
2	U 409.014†	-86.5	141.4	-44.102 µg/L	-44.102 ppb	08:53:57
2	V 292.402†	-836.4	-762.9	0.6905 µg/L	0.6905 ppb	08:53:57
2	Zn 213.857†	1844.0	1279.8	-0.4164 µg/L	-0.4164 ppb	08:54:17
3	Sc RADIAL	75735.6	75735.6	98.6 %		08:53:09
3	Al 396.153Radial†	746305.3	757016.3	526010 µg/L	526010 ppb	08:53:03
3	Ca 317.933Radial†	629993.4	638759.7	502970 µg/L	502970 ppb	08:53:03
3	Fe 238.204 Radial†	13382.8	13558.5	194650 µg/L	194650 ppb	08:53:09
3	K 766.490 Radial†	340.8	-66.3	-44.028 µg/L	-44.028 ppb	08:53:09
3	Mg 279.077 IEC†	45682.7	46328.3	504700 µg/L	504700 ppb	08:53:09
3	Na 589.592 Radial†	522.2	-15.3	-4.3923 µg/L	-4.3923 ppb	08:53:09
3	Sr 421.552†	1123.7	582.1	3.6984 µg/L	3.6984 ppb	08:53:09
3	Sc 361.383	1842417.1	1842417.1	94.804 %		08:54:24
3	Y 371.029	1152634.8	1152634.8	93.802 %		08:54:24
3	Ag 328.068†	-1949.8	-2001.6	-6.4621 µg/L	-6.4621 ppb	08:54:29
3	As 188.979†	-7.6	-8.6	-34.578 µg/L	-34.578 ppb	08:54:50
3	B 249.677†	2197.6	2202.9	5.5989 µg/L	5.5989 ppb	08:54:29
3	Ba 233.527†	207.9	233.8	6.7748 µg/L	6.7748 ppb	08:54:50
3	Be 313.107†	3071.7	-599.4	-0.4279 µg/L	-0.4279 ppb	08:54:29
3	Cd 226.502†	633.5	803.7	1.6613 µg/L	1.6613 ppb	08:54:50
3	Co 228.616†	-5.8	38.9	2.0803 µg/L	2.0803 ppb	08:54:50
3	Cr 267.716†	-98.9	-21.5	-0.5048 µg/L	-0.5048 ppb	08:54:50
3	Cu 324.752†	606.9	-3028.1	4.2888 µg/L	4.2888 ppb	08:54:29
3	Mn 257.610†	-2385.5	-2326.8	-2.9035 µg/L	-2.9035 ppb	08:54:29
3	Mo 202.031†	-85.8	-107.7	-6.1290 µg/L	-6.1290 ppb	08:54:50
3	Ni 231.604†	308.7	-9.8	1.9103 µg/L	1.9103 ppb	08:54:50
3	P 214.914†	211.0	20.1	40.695 µg/L	40.695 ppb	08:54:50
3	Pb 220.353†	-46.5	-105.0	-9.0913 µg/L	-9.0913 ppb	08:54:50
3	S 181.975 Axial†	65.1	43.1	247.23 µg/L	247.23 ppb	08:54:50
3	Sb 206.836†	52.7	33.2	3.3537 µg/L	3.3537 ppb	08:54:50
3	Se 196.026†	-407.0	-441.7	-33.988 µg/L	-33.988 ppb	08:54:50
3	SiO2†	2012.8	-155.7	-32.858 µg/L	-32.858 ppb	08:54:50
3	Si 251.611†	360.2	75.4	6.3241 µg/L	6.3241 ppb	08:54:50
3	Sn 189.927†	-342.3	-384.5	1.6001 µg/L	1.6001 ppb	08:54:50
3	Ti 334.940†	10960.7	10787.7	-4.9362 µg/L	-4.9362 ppb	08:54:29
3	Tl 190.801†	13.3	37.1	-24.079 µg/L	-24.079 ppb	08:54:50
3	U 409.014†	-104.8	122.4	-46.059 µg/L	-46.059 ppb	08:54:29
3	V 292.402†	-893.1	-820.0	0.0271 µg/L	0.0271 ppb	08:54:29
3	Zn 213.857†	1830.5	1259.6	-1.1148 µg/L	-1.1148 ppb	08:54:50

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1840626.4	94.712	%	0.1776				0.19%
Sc RADIAL	75839.4	98.7	%	0.13				0.13%
Y 371.029	1150560.3	93.633	%	0.2162				0.23%
Ag 328.068†	-1997.9	-6.4484	µg/L	0.11925	-6.4484	ppb	0.11925	1.85%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	754875.4	524530	µg/L	1417.3	524530	ppb	1417.3	0.27%
QC value within limits for Al 396.153Radial Recovery = 104.91%								
As 188.979†	-7.9	-32.951	µg/L	6.0520	-32.951	ppb	6.0520	18.37%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2209.7	6.1214	µg/L	0.75460	6.1214	ppb	0.75460	12.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	238.1	6.8985	µg/L	0.12707	6.8985	ppb	0.12707	1.84%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-618.6	-0.4411	µg/L	0.01782	-0.4411	ppb	0.01782	4.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	637513.0	501990	µg/L	1311.5	501990	ppb	1311.5	0.26%
QC value within limits for Ca 317.933Radial Recovery = 100.40%								
Cd 226.502†	820.6	2.1997	µg/L	0.50032	2.1997	ppb	0.50032	22.74%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	41.0	2.1967	µg/L	0.57250	2.1967	ppb	0.57250	26.06%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -32.1     -0.7517 µg/L       0.48284     -0.7517 ppb        0.48284  64.24%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3019.3      4.3044 µg/L       0.27189      4.3044 ppb        0.27189   6.32%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     13533.3      194290 µg/L         410.6      194290 ppb          410.6   0.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.14%
K 766.490 Radial†        -94.6     -62.816 µg/L       24.0181     -62.816 ppb        24.0181  38.24%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        46226.3      503590 µg/L        1083.2      503590 ppb         1083.2   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.72%
Mn 257.610†            -2355.7     -3.0140 µg/L       0.14470     -3.0140 ppb        0.14470   4.80%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -113.2     -6.8296 µg/L       0.78908     -6.8296 ppb        0.78908  11.55%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        9.2      2.6490 µg/L       9.46729      2.6490 ppb        9.46729 357.39%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -16.5      1.4819 µg/L       0.37213      1.4819 ppb        0.37213  25.11%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                25.6      53.801 µg/L       11.3499      53.801 ppb        11.3499  21.10%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -106.2     -9.5167 µg/L       0.74063     -9.5167 ppb        0.74063   7.78%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          42.0      240.89 µg/L        11.898      240.89 ppb         11.898   4.94%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               42.6      13.771 µg/L       10.0427      13.771 ppb        10.0427  72.93%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -448.4     -45.712 µg/L       14.2612     -45.712 ppb        14.2612  31.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -155.3     -32.775 µg/L        0.3289     -32.775 ppb         0.3289   1.00%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               87.6      7.3457 µg/L       1.23740      7.3457 ppb        1.23740  16.85%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -381.1      3.0948 µg/L       2.69386      3.0948 ppb        2.69386  87.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              565.1      3.5907 µg/L       0.13390      3.5907 ppb        0.13390   3.73%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            10643.4     -5.2239 µg/L       0.25121     -5.2239 ppb        0.25121   4.81%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               36.0     -25.765 µg/L        2.8592     -25.765 ppb         2.8592  11.10%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               109.8     -47.149 µg/L        3.7135     -47.149 ppb         3.7135   7.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -792.7      0.3395 µg/L       0.33339      0.3395 ppb        0.33339  98.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             1265.9     -0.8489 µg/L       0.37780     -0.8489 ppb        0.37780  44.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 1/27/2010 08:54:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75550.8	75550.8	98.3	%			08:55:38
1	Al 396.153Radial†	748321.0	760917.0	528710	µg/L	528710	ppb	08:55:33
1	Ca 317.933Radial†	632068.2	642432.1	505860	µg/L	505860	ppb	08:55:33
1	Fe 238.204 Radial†	13568.8	13780.8	197850	µg/L	197850	ppb	08:55:38
1	K 766.490 Radial†	8266.6	7993.5	5306.4	µg/L	5306.4	ppb	08:55:38
1	Mg 279.077 IEC†	46355.5	47125.7	513400	µg/L	513400	ppb	08:55:38
1	Na 589.592 Radial†	18553.0	18319.7	5260.7	µg/L	5260.7	ppb	08:55:38
1	Sr 421.552†	81816.6	82633.0	525.04	µg/L	525.04	ppb	08:55:33
1	Sc 361.383	1827534.5	1827534.5	94.038	%			08:56:12
1	Y 371.029	1143714.8	1143714.8	93.076	%			08:56:12
1	Ag 328.068†	25067.8	26712.1	264.90	µg/L	264.90	ppb	08:56:17
1	As 188.979†	213.4	226.4	506.61	µg/L	506.61	ppb	08:56:38
1	B 249.677†	12550.6	13231.0	541.26	µg/L	541.26	ppb	08:56:17
1	Ba 233.527†	16981.7	18072.8	526.01	µg/L	526.01	ppb	08:56:17
1	Be 313.107†	342188.8	360043.0	250.64	µg/L	250.64	ppb	08:56:12
1	Cd 226.502†	16151.5	17310.9	487.68	µg/L	487.68	ppb	08:56:17
1	Co 228.616†	7872.8	8416.9	463.87	µg/L	463.87	ppb	08:56:38
1	Cr 267.716†	20535.7	21920.3	508.76	µg/L	508.76	ppb	08:56:17
1	Cu 324.752†	71349.1	72204.2	570.39	µg/L	570.39	ppb	08:56:17
1	Mn 257.610†	123924.4	131970.2	493.30	µg/L	493.30	ppb	08:56:17
1	Mo 202.031†	3764.6	3986.1	508.18	µg/L	508.18	ppb	08:56:38
1	Ni 231.604†	7186.7	7306.9	462.40	µg/L	462.40	ppb	08:56:38
1	P 214.914†	1261.8	1139.3	2666.7	µg/L	2666.7	ppb	08:56:38
1	Pb 220.353†	1586.8	1631.5	497.34	µg/L	497.34	ppb	08:56:38
1	S 181.975 Axial†	509.9	516.7	2961.9	µg/L	2961.9	ppb	08:56:38
1	Sb 206.836†	508.0	517.8	542.16	µg/L	542.16	ppb	08:56:38
1	Se 196.026†	1103.2	1160.7	2507.0	µg/L	2507.0	ppb	08:56:38
1	SiO2†	53181.3	54274.0	11456	µg/L	11456	ppb	08:56:17
1	Si 251.611†	60421.0	63947.0	5363.7	µg/L	5363.7	ppb	08:56:17
1	Sn 189.927†	541.6	552.6	551.16	µg/L	551.16	ppb	08:56:38
1	Ti 334.940†	204861.3	217075.2	508.90	µg/L	508.90	ppb	08:56:17
1	Tl 190.801†	286.7	328.0	482.00	µg/L	482.00	ppb	08:56:38
1	U 409.014†	4801.9	5339.3	451.16	µg/L	451.16	ppb	08:56:17
1	V 292.402†	39287.2	41900.0	537.07	µg/L	537.07	ppb	08:56:17
1	Zn 213.857†	17804.0	18261.4	490.95	µg/L	490.95	ppb	08:56:17
2	Sc RADIAL	74638.0	74638.0	97.2	%			08:55:49
2	Al 396.153Radial†	750422.4	772385.3	536680	µg/L	536680	ppb	08:55:44
2	Ca 317.933Radial†	633173.4	651429.5	512950	µg/L	512950	ppb	08:55:44
2	Fe 238.204 Radial†	13439.4	13816.3	198360	µg/L	198360	ppb	08:55:49
2	K 766.490 Radial†	8178.5	8005.5	5314.4	µg/L	5314.4	ppb	08:55:49
2	Mg 279.077 IEC†	45878.4	47211.1	514330	µg/L	514330	ppb	08:55:49
2	Na 589.592 Radial†	18414.1	18407.4	5285.9	µg/L	5285.9	ppb	08:55:49
2	Sr 421.552†	82019.1	83858.8	532.83	µg/L	532.83	ppb	08:55:44
2	Sc 361.383	1820670.0	1820670.0	93.685	%			08:56:44
2	Y 371.029	1139248.7	1139248.7	92.712	%			08:56:44
2	Ag 328.068†	25242.5	26999.0	267.64	µg/L	267.64	ppb	08:56:50
2	As 188.979†	213.7	227.6	509.04	µg/L	509.04	ppb	08:57:11
2	B 249.677†	12643.9	13381.0	548.30	µg/L	548.30	ppb	08:56:50
2	Ba 233.527†	17045.2	18208.7	529.97	µg/L	529.97	ppb	08:56:50
2	Be 313.107†	340227.7	359321.6	250.14	µg/L	250.14	ppb	08:56:44
2	Cd 226.502†	16247.3	17477.9	492.55	µg/L	492.55	ppb	08:56:50
2	Co 228.616†	7901.7	8479.3	467.31	µg/L	467.31	ppb	08:57:11
2	Cr 267.716†	20676.1	22152.6	514.15	µg/L	514.15	ppb	08:56:50
2	Cu 324.752†	72048.9	73237.2	578.23	µg/L	578.23	ppb	08:56:50
2	Mn 257.610†	124670.3	133263.3	498.11	µg/L	498.11	ppb	08:56:50
2	Mo 202.031†	3766.1	4002.8	510.30	µg/L	510.30	ppb	08:57:11
2	Ni 231.604†	7218.0	7369.1	466.32	µg/L	466.32	ppb	08:57:11
2	P 214.914†	1261.3	1143.9	2678.8	µg/L	2678.8	ppb	08:57:11
2	Pb 220.353†	1607.4	1659.8	506.01	µg/L	506.01	ppb	08:57:11

2	S 181.975 Axial†	514.3	523.4	3000.5 µg/L	3000.5 ppb	08:57:11
2	Sb 206.836†	519.4	532.0	557.44 µg/L	557.44 ppb	08:57:11
2	Se 196.026†	1101.5	1163.3	2514.4 µg/L	2514.4 ppb	08:57:11
2	SiO2†	53503.4	54831.1	11573 µg/L	11573 ppb	08:56:50
2	Si 251.611†	60806.6	64600.8	5418.5 µg/L	5418.5 ppb	08:56:50
2	Sn 189.927†	547.6	561.1	557.91 µg/L	557.91 ppb	08:57:11
2	Ti 334.940†	206113.6	219233.2	514.32 µg/L	514.32 ppb	08:56:50
2	Tl 190.801†	291.8	334.5	492.28 µg/L	492.28 ppb	08:57:11
2	U 409.014†	4798.3	5354.7	452.13 µg/L	452.13 ppb	08:56:50
2	V 292.402†	39508.2	42293.5	542.02 µg/L	542.02 ppb	08:56:50
2	Zn 213.857†	17912.7	18448.8	496.31 µg/L	496.31 ppb	08:56:50
3	Sc RADIAL	74598.0	74598.0	97.1 %		08:56:01
3	Al 396.153Radial†	750572.4	772953.5	537080 µg/L	537080 ppb	08:55:55
3	Ca 317.933Radial†	633253.0	651860.5	513290 µg/L	513290 ppb	08:55:55
3	Fe 238.204 Radial†	13515.5	13902.1	199590 µg/L	199590 ppb	08:56:01
3	K 766.490 Radial†	8161.2	7992.2	5305.5 µg/L	5305.5 ppb	08:56:01
3	Mg 279.077 IEC†	46106.3	47471.1	517160 µg/L	517160 ppb	08:56:01
3	Na 589.592 Radial†	18464.1	18469.0	5303.6 µg/L	5303.6 ppb	08:56:01
3	Sr 421.552†	82085.6	83972.5	533.55 µg/L	533.55 ppb	08:55:55
3	Sc 361.383	1845921.4	1845921.4	94.984 %		08:57:17
3	Y 371.029	1153635.5	1153635.5	93.883 %		08:57:17
3	Ag 328.068†	25156.0	26539.4	263.37 µg/L	263.37 ppb	08:57:23
3	As 188.979†	205.4	215.7	481.69 µg/L	481.69 ppb	08:57:44
3	B 249.677†	12533.9	13080.5	533.03 µg/L	533.03 ppb	08:57:23
3	Ba 233.527†	17021.1	17934.4	521.98 µg/L	521.98 ppb	08:57:23
3	Be 313.107†	342872.9	357138.6	248.62 µg/L	248.62 ppb	08:57:17
3	Cd 226.502†	16103.2	17089.0	480.95 µg/L	480.95 ppb	08:57:23
3	Co 228.616†	7892.6	8354.3	460.43 µg/L	460.43 ppb	08:57:44
3	Cr 267.716†	20566.9	21735.7	504.47 µg/L	504.47 ppb	08:57:23
3	Cu 324.752†	71701.5	71819.5	567.74 µg/L	567.74 ppb	08:57:23
3	Mn 257.610†	124320.6	131074.8	490.07 µg/L	490.07 ppb	08:57:23
3	Mo 202.031†	3773.5	3955.6	504.41 µg/L	504.41 ppb	08:57:44
3	Ni 231.604†	7217.5	7263.2	459.67 µg/L	459.67 ppb	08:57:44
3	P 214.914†	1263.9	1128.2	2641.3 µg/L	2641.3 ppb	08:57:44
3	Pb 220.353†	1608.1	1637.0	499.35 µg/L	499.35 ppb	08:57:44
3	S 181.975 Axial†	506.6	507.9	2911.2 µg/L	2911.2 ppb	08:57:44
3	Sb 206.836†	509.6	514.1	537.56 µg/L	537.56 ppb	08:57:44
3	Se 196.026†	1108.5	1154.6	2504.3 µg/L	2504.3 ppb	08:57:44
3	SiO2†	53388.5	53928.9	11383 µg/L	11383 ppb	08:57:23
3	Si 251.611†	60471.9	63360.6	5314.5 µg/L	5314.5 ppb	08:57:23
3	Sn 189.927†	544.1	549.4	551.84 µg/L	551.84 ppb	08:57:44
3	Ti 334.940†	205493.7	215570.9	504.97 µg/L	504.97 ppb	08:57:23
3	Tl 190.801†	289.8	328.2	481.19 µg/L	481.19 ppb	08:57:44
3	U 409.014†	4815.9	5303.2	447.02 µg/L	447.02 ppb	08:57:23
3	V 292.402†	39287.1	41483.7	531.94 µg/L	531.94 ppb	08:57:23
3	Zn 213.857†	17861.9	18133.8	486.95 µg/L	486.95 ppb	08:57:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1831375.3	94.236	%	0.6718				0.71%
Sc RADIAL	74929.0	97.5	%	0.70				0.72%
Y 371.029	1145533.0	93.224	%	0.5993				0.64%
Ag 328.068†	26750.2	265.30	µg/L	2.165	265.30	ppb	2.165	0.82%
QC value within limits for Ag 328.068 Recovery = 106.12%								
Al 396.153Radial†	768751.9	534160	µg/L	4718.9	534160	ppb	4718.9	0.88%
QC value within limits for Al 396.153Radial Recovery = 106.83%								
As 188.979†	223.2	499.11	µg/L	15.141	499.11	ppb	15.141	3.03%
QC value within limits for As 188.979 Recovery = 99.82%								
B 249.677†	13230.9	540.86	µg/L	7.646	540.86	ppb	7.646	1.41%
QC value within limits for B 249.677 Recovery = 108.17%								
Ba 233.527†	18071.9	525.99	µg/L	3.994	525.99	ppb	3.994	0.76%
QC value within limits for Ba 233.527 Recovery = 105.20%								
Be 313.107†	358834.4	249.80	µg/L	1.052	249.80	ppb	1.052	0.42%
QC value within limits for Be 313.107 Recovery = 99.92%								
Ca 317.933Radial†	648574.0	510700	µg/L	4191.8	510700	ppb	4191.8	0.82%
QC value within limits for Ca 317.933Radial Recovery = 102.14%								
Cd 226.502†	17292.6	487.06	µg/L	5.822	487.06	ppb	5.822	1.20%
QC value within limits for Cd 226.502 Recovery = 97.41%								
Co 228.616†	8416.9	463.87	µg/L	3.442	463.87	ppb	3.442	0.74%

```
   QC value within limits for Co 228.616  Recovery = 92.77%
Cr 267.716†            21936.2      509.13 µg/L        4.848      509.13 ppb        4.848   0.95%
   QC value within limits for Cr 267.716  Recovery = 101.83%
Cu 324.752†            72420.3      572.12 µg/L        5.454      572.12 ppb        5.454   0.95%
   QC value within limits for Cu 324.752  Recovery = 114.42%
Fe 238.204 Radial†     13833.1      198600 µg/L        895.5      198600 ppb        895.5   0.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.30%
K 766.490 Radial†       7997.1      5308.8 µg/L         4.88      5308.8 ppb         4.88   0.09%
   QC value within limits for K 766.490 Radial  Recovery = 106.18%
Mg 279.077 IEC†        47269.3      514960 µg/L       1959.7      514960 ppb       1959.7   0.38%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.99%
Mn 257.610†           132102.8      493.83 µg/L        4.043      493.83 ppb        4.043   0.82%
   QC value within limits for Mn 257.610  Recovery = 98.77%
Mo 202.031†             3981.5      507.63 µg/L        2.981      507.63 ppb        2.981   0.59%
   QC value within limits for Mo 202.031  Recovery = 101.53%
Na 589.592 Radial†     18398.7      5283.4 µg/L        21.55      5283.4 ppb        21.55   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 105.67%
Ni 231.604†             7313.1      462.80 µg/L        3.342      462.80 ppb        3.342   0.72%
   QC value within limits for Ni 231.604  Recovery = 92.56%
P 214.914†              1137.1      2662.3 µg/L        19.10      2662.3 ppb        19.10   0.72%
   QC value within limits for P 214.914  Recovery = 106.49%
Pb 220.353†             1642.8      500.90 µg/L        4.537      500.90 ppb        4.537   0.91%
   QC value within limits for Pb 220.353  Recovery = 100.18%
S 181.975 Axial†         516.0      2957.9 µg/L        44.80      2957.9 ppb        44.80   1.51%
   QC value within limits for S 181.975 Axial  Recovery = 118.31%
Sb 206.836†              521.3      545.72 µg/L       10.406      545.72 ppb       10.406   1.91%
   QC value within limits for Sb 206.836  Recovery = 109.14%
Se 196.026†             1159.5      2508.6 µg/L         5.21      2508.6 ppb         5.21   0.21%
   QC value within limits for Se 196.026  Recovery = 100.34%
SiO2†                  54344.7       11471 µg/L         96.1       11471 ppb         96.1   0.84%
   QC value within limits for SiO2  Recovery = 107.25%
Si 251.611†            63969.5      5365.6 µg/L        52.04      5365.6 ppb        52.04   0.97%
   QC value within limits for Si 251.611  Recovery = 107.31%
Sn 189.927†              554.4      553.64 µg/L        3.717      553.64 ppb        3.717   0.67%
   QC value within limits for Sn 189.927  Recovery = 110.73%
Sr 421.552†            83488.1      530.48 µg/L        4.719      530.48 ppb        4.719   0.89%
   QC value within limits for Sr 421.552  Recovery = 106.10%
Ti 334.940†           217293.1      509.40 µg/L        4.696      509.40 ppb        4.696   0.92%
   QC value within limits for Ti 334.940  Recovery = 101.88%
Tl 190.801†              330.2      485.16 µg/L        6.187      485.16 ppb        6.187   1.28%
   QC value within limits for Tl 190.801  Recovery = 97.03%
U 409.014†              5332.4      450.11 µg/L        2.714      450.11 ppb        2.714   0.60%
   QC value within limits for U 409.014  Recovery = 90.02%
V 292.402†             41892.4      537.01 µg/L        5.039      537.01 ppb        5.039   0.94%
   QC value within limits for V 292.402  Recovery = 107.40%
Zn 213.857†            18281.3      491.41 µg/L        4.695      491.41 ppb        4.695   0.96%
   QC value within limits for Zn 213.857  Recovery = 98.28%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 1/27/2010 08:57:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	74075.3	74075.3	96.4	%			08:58:33
1	Al 396.153Radial†	739137.1	766548.6	532640	µg/L	532640	ppb	08:58:28
1	Ca 317.933Radial†	629490.7	652560.4	513840	µg/L	513840	ppb	08:58:28
1	Fe 238.204 Radial†	32125.2	33299.5	478060	µg/L	478060	ppb	08:58:33
1	K 766.490 Radial†	257.8	-144.7	-96.039	µg/L	-96.039	ppb	08:58:33
1	Mg 279.077 IEC†	44900.3	46555.5	506870	µg/L	506870	ppb	08:58:33
1	Na 589.592 Radial†	1700122.4	1762563.6	506140	µg/L	506140	ppb	08:58:28
1	Sr 421.552†	1311.6	802.5	5.0990	µg/L	5.0990	ppb	08:58:33
1	Sc 361.383	1801363.6	1801363.6	92.692	%			08:59:08
1	Y 371.029	1119534.0	1119534.0	91.108	%			08:59:08
1	Ag 328.068†	-3791.2	-4035.0	-7.7804	µg/L	-7.7804	ppb	08:59:14
1	As 188.979†	-18.9	-20.9	-47.226	µg/L	-47.226	ppb	08:59:34
1	B 249.677†	5123.0	5411.7	13.835	µg/L	13.835	ppb	08:59:14
1	Ba 233.527†	467.6	519.0	15.001	µg/L	15.001	ppb	08:59:34
1	Be 313.107†	-960.8	-4876.0	-3.4083	µg/L	-3.4083	ppb	08:59:14
1	Cd 226.502†	1740.8	2013.5	5.2460	µg/L	5.2460	ppb	08:59:14
1	Co 228.616†	111.8	165.6	9.0515	µg/L	9.0515	ppb	08:59:34
1	Cr 267.716†	192.2	290.2	6.7026	µg/L	6.7026	ppb	08:59:34
1	Cu 324.752†	-4334.0	-8343.9	3.7135	µg/L	3.7135	ppb	08:59:14
1	Mn 257.610†	-12804.7	-13624.8	-7.0466	µg/L	-7.0466	ppb	08:59:14
1	Mo 202.031†	-217.7	-252.0	-13.490	µg/L	-13.490	ppb	08:59:34
1	Ni 231.604†	260.5	-54.4	2.7770	µg/L	2.7770	ppb	08:59:34
1	P 214.914†	378.9	206.3	261.97	µg/L	261.97	ppb	08:59:34
1	Pb 220.353†	61.1	10.0	-1.3691	µg/L	-1.3691	ppb	08:59:34
1	S 181.975 Axial†	54.4	33.2	190.13	µg/L	190.13	ppb	08:59:34
1	Sb 206.836†	56.1	38.2	7.7505	µg/L	7.7505	ppb	08:59:34
1	Se 196.026†	-1148.7	-1251.6	-226.81	µg/L	-226.81	ppb	08:59:34
1	SiO2†	1530.9	-627.2	-132.38	µg/L	-132.38	ppb	08:59:34
1	Si 251.611†	-281.6	-608.3	-51.019	µg/L	-51.019	ppb	08:59:34
1	Sn 189.927†	-374.0	-426.9	5.7349	µg/L	5.7349	ppb	08:59:34
1	Ti 334.940†	11564.3	11702.5	-2.6766	µg/L	-2.6766	ppb	08:59:14
1	Tl 190.801†	12.1	36.1	-22.295	µg/L	-22.295	ppb	08:59:34
1	U 409.014†	143954.4	155537.6	14745	µg/L	14745	ppb	08:59:08
1	V 292.402†	-3342.3	-3483.7	-2.7891	µg/L	-2.7891	ppb	08:59:14
1	Zn 213.857†	3016.6	2583.1	23.945	µg/L	23.945	ppb	08:59:34
2	Sc RADIAL	74358.4	74358.4	96.8	%			08:58:45
2	Al 396.153Radial†	738176.4	762638.4	529920	µg/L	529920	ppb	08:58:40
2	Ca 317.933Radial†	628111.5	648650.7	510760	µg/L	510760	ppb	08:58:40
2	Fe 238.204 Radial†	32231.4	33282.4	477820	µg/L	477820	ppb	08:58:45
2	K 766.490 Radial†	324.1	-77.1	-51.207	µg/L	-51.207	ppb	08:58:45
2	Mg 279.077 IEC†	45012.7	46494.3	506210	µg/L	506210	ppb	08:58:45
2	Na 589.592 Radial†	1699359.1	1755063.8	503990	µg/L	503990	ppb	08:58:40
2	Sr 421.552†	1313.9	799.7	5.0815	µg/L	5.0815	ppb	08:58:45
2	Sc 361.383	1820153.5	1820153.5	93.658	%			08:59:41
2	Y 371.029	1131986.5	1131986.5	92.121	%			08:59:41
2	Ag 328.068†	-3739.5	-3937.7	-6.8872	µg/L	-6.8872	ppb	08:59:47
2	As 188.979†	-9.2	-10.3	-22.607	µg/L	-22.607	ppb	09:00:07
2	B 249.677†	5107.4	5338.0	10.378	µg/L	10.378	ppb	08:59:47
2	Ba 233.527†	463.9	509.8	14.733	µg/L	14.733	ppb	09:00:07
2	Be 313.107†	-872.6	-4771.1	-3.3352	µg/L	-3.3352	ppb	08:59:47
2	Cd 226.502†	1694.4	1944.6	3.2465	µg/L	3.2465	ppb	08:59:47
2	Co 228.616†	116.8	169.7	9.2762	µg/L	9.2762	ppb	09:00:07
2	Cr 267.716†	187.2	282.7	6.5293	µg/L	6.5293	ppb	09:00:07
2	Cu 324.752†	-4427.7	-8395.7	3.2902	µg/L	3.2902	ppb	08:59:47
2	Mn 257.610†	-12846.1	-13526.4	-6.6892	µg/L	-6.6892	ppb	08:59:47
2	Mo 202.031†	-230.3	-263.1	-14.884	µg/L	-14.884	ppb	09:00:07
2	Ni 231.604†	264.8	-52.7	2.8805	µg/L	2.8805	ppb	09:00:07
2	P 214.914†	391.2	215.2	282.88	µg/L	282.88	ppb	09:00:07
2	Pb 220.353†	64.3	12.7	-0.6803	µg/L	-0.6803	ppb	09:00:07

2	S 181.975 Axial†	65.6	44.5	255.26 µg/L	255.26 ppb	09:00:07
2	Sb 206.836†	48.6	29.5	-1.6856 µg/L	-1.6856 ppb	09:00:07
2	Se 196.026†	-1147.4	-1237.5	-205.94 µg/L	-205.94 ppb	09:00:07
2	SiO2†	1537.2	-637.5	-134.57 µg/L	-134.57 ppb	09:00:07
2	Si 251.611†	-258.9	-580.9	-48.724 µg/L	-48.724 ppb	09:00:07
2	Sn 189.927†	-374.3	-423.1	7.1705 µg/L	7.1705 ppb	09:00:07
2	Ti 334.940†	11690.1	11707.9	-2.6595 µg/L	-2.6595 ppb	08:59:47
2	Tl 190.801†	1.5	24.7	-41.414 µg/L	-41.414 ppb	09:00:07
2	U 409.014†	144885.8	154928.8	14687 µg/L	14687 ppb	08:59:41
2	V 292.402†	-3364.2	-3469.8	-2.7007 µg/L	-2.7007 ppb	08:59:47
2	Zn 213.857†	3028.2	2561.9	23.376 µg/L	23.376 ppb	09:00:07
3	Sc RADIAL	74134.8	74134.8	96.5 %		08:58:57
3	Al 396.153Radial†	736230.3	762921.9	530120 µg/L	530120 ppb	08:58:51
3	Ca 317.933Radial†	624586.7	646955.3	509430 µg/L	509430 ppb	08:58:51
3	Fe 238.204 Radial†	32217.1	33368.0	479050 µg/L	479050 ppb	08:58:57
3	K 766.490 Radial†	303.2	-97.8	-64.922 µg/L	-64.922 ppb	08:58:57
3	Mg 279.077 IEC†	44945.2	46564.7	506970 µg/L	506970 ppb	08:58:57
3	Na 589.592 Radial†	1695729.6	1756598.1	504430 µg/L	504430 ppb	08:58:51
3	Sr 421.552†	1288.6	777.6	4.9405 µg/L	4.9405 ppb	08:58:57
3	Sc 361.383	1816386.2	1816386.2	93.465 %		09:00:14
3	Y 371.029	1129814.7	1129814.7	91.945 %		09:00:14
3	Ag 328.068†	-3787.5	-3997.2	-7.3667 µg/L	-7.3667 ppb	09:00:20
3	As 188.979†	-13.6	-15.1	-33.575 µg/L	-33.575 ppb	09:00:40
3	B 249.677†	5143.4	5387.9	12.164 µg/L	12.164 ppb	09:00:20
3	Ba 233.527†	449.7	495.6	14.321 µg/L	14.321 ppb	09:00:40
3	Be 313.107†	-966.7	-4873.8	-3.4068 µg/L	-3.4068 ppb	09:00:20
3	Cd 226.502†	1714.7	1970.0	3.8572 µg/L	3.8572 ppb	09:00:20
3	Co 228.616†	128.7	182.7	9.9944 µg/L	9.9944 ppb	09:00:40
3	Cr 267.716†	225.1	323.6	7.4791 µg/L	7.4791 ppb	09:00:40
3	Cu 324.752†	-4461.8	-8442.0	3.1131 µg/L	3.1131 ppb	09:00:20
3	Mn 257.610†	-12874.0	-13584.7	-6.7719 µg/L	-6.7719 ppb	09:00:20
3	Mo 202.031†	-221.7	-254.4	-13.751 µg/L	-13.751 ppb	09:00:40
3	Ni 231.604†	271.2	-45.2	3.3666 µg/L	3.3666 ppb	09:00:40
3	P 214.914†	382.7	206.9	262.17 µg/L	262.17 ppb	09:00:40
3	Pb 220.353†	59.2	7.5	-2.2884 µg/L	-2.2884 ppb	09:00:40
3	S 181.975 Axial†	44.6	22.2	127.27 µg/L	127.27 ppb	09:00:40
3	Sb 206.836†	50.2	31.3	0.4562 µg/L	0.4562 ppb	09:00:40
3	Se 196.026†	-1149.3	-1242.0	-208.97 µg/L	-208.97 ppb	09:00:40
3	SiO2†	1539.9	-631.2	-133.22 µg/L	-133.22 ppb	09:00:40
3	Si 251.611†	-278.7	-602.7	-50.554 µg/L	-50.554 ppb	09:00:40
3	Sn 189.927†	-374.0	-423.6	6.8229 µg/L	6.8229 ppb	09:00:40
3	Ti 334.940†	11713.5	11758.9	-2.6145 µg/L	-2.6145 ppb	09:00:20
3	Tl 190.801†	2.7	26.0	-39.027 µg/L	-39.027 ppb	09:00:40
3	U 409.014†	145084.5	155462.2	14738 µg/L	14738 ppb	09:00:14
3	V 292.402†	-3377.4	-3491.4	-2.8406 µg/L	-2.8406 ppb	09:00:20
3	Zn 213.857†	3048.0	2589.8	24.088 µg/L	24.088 ppb	09:00:40

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1812634.4	93.272	%	0.5115				0.55%
Sc RADIAL	74189.5	96.6	%	0.19				0.20%
Y 371.029	1127111.8	91.725	%	0.5413				0.59%
Ag 328.068†	-3990.0	-7.3447	µg/L	0.44699	-7.3447	ppb	0.44699	6.09%
Al 396.153Radial†	764036.3	530890	µg/L	1515.0	530890	ppb	1515.0	0.29%
QC value within limits for Al 396.153Radial Recovery = 106.18%								
As 188.979†	-15.5	-34.469	µg/L	12.3339	-34.469	ppb	12.3339	35.78%
B 249.677†	5379.2	12.126	µg/L	1.7285	12.126	ppb	1.7285	14.25%
Ba 233.527†	508.2	14.685	µg/L	0.3429	14.685	ppb	0.3429	2.33%
Be 313.107†	-4840.3	-3.3834	µg/L	0.04177	-3.3834	ppb	0.04177	1.23%
Ca 317.933Radial†	649388.8	511340	µg/L	2263.5	511340	ppb	2263.5	0.44%
QC value within limits for Ca 317.933Radial Recovery = 102.27%								
Cd 226.502†	1976.0	4.1165	µg/L	1.02465	4.1165	ppb	1.02465	24.89%
Co 228.616†	172.7	9.4407	µg/L	0.49250	9.4407	ppb	0.49250	5.22%
Cr 267.716†	298.8	6.9037	µg/L	0.50578	6.9037	ppb	0.50578	7.33%
Cu 324.752†	-8393.9	3.3723	µg/L	0.30850	3.3723	ppb	0.30850	9.15%
Fe 238.204 Radial†	33316.6	478310	µg/L	650.5	478310	ppb	650.5	0.14%
QC value within limits for Fe 238.204 Radial Recovery = 95.66%								
K 766.490 Radial†	-106.5	-70.722	µg/L	22.9719	-70.722	ppb	22.9719	32.48%
Mg 279.077 IEC†	46538.2	506690	µg/L	416.4	506690	ppb	416.4	0.08%

QC value within limits for Mg 279.077 IEC Recovery = 101.34%

Mn 257.610†	-13578.6	-6.8359 µg/L	0.18708	-6.8359 ppb	0.18708	2.74%
Mo 202.031†	-256.5	-14.042 µg/L	0.7409	-14.042 ppb	0.7409	5.28%
Na 589.592 Radial†	1758075.2	504850 µg/L	1137.8	504850 ppb	1137.8	0.23%

QC value within limits for Na 589.592 Radial Recovery = 100.97%

Ni 231.604†	-50.8	3.0080 µg/L	0.31482	3.0080 ppb	0.31482	10.47%
P 214.914†	209.5	269.01 µg/L	12.013	269.01 ppb	12.013	4.47%
Pb 220.353†	10.1	-1.4460 µg/L	0.80676	-1.4460 ppb	0.80676	55.79%
S 181.975 Axial†	33.3	190.89 µg/L	63.997	190.89 ppb	63.997	33.53%
Sb 206.836†	33.0	2.1737 µg/L	4.94696	2.1737 ppb	4.94696	227.58%
Se 196.026†	-1243.7	-213.91 µg/L	11.275	-213.91 ppb	11.275	5.27%
SiO2†	-632.0	-133.39 µg/L	1.100	-133.39 ppb	1.100	0.82%
Si 251.611†	-597.3	-50.099 µg/L	1.2130	-50.099 ppb	1.2130	2.42%
Sn 189.927†	-424.5	6.5761 µg/L	0.74897	6.5761 ppb	0.74897	11.39%
Sr 421.552†	793.3	5.0404 µg/L	0.08690	5.0404 ppb	0.08690	1.72%
Ti 334.940†	11723.1	-2.6502 µg/L	0.03210	-2.6502 ppb	0.03210	1.21%
Tl 190.801†	28.9	-34.246 µg/L	10.4179	-34.246 ppb	10.4179	30.42%
U 409.014†	155309.6	14723 µg/L	31.6	14723 ppb	31.6	0.21%

QC value within limits for U 409.014 Recovery = 98.16%

V 292.402†	-3481.6	-2.7768 µg/L	0.07077	-2.7768 ppb	0.07077	2.55%
Zn 213.857†	2578.3	23.803 µg/L	0.3766	23.803 ppb	0.3766	1.58%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 1/27/2010 09:00:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77219.9	77219.9	101	%			09:01:32
1	Al 396.153Radial†	419.6	445.3	96.776	µg/L	96.776	ppb	09:01:32
1	Ca 317.933Radial†	367.4	113.9	89.668	µg/L	89.668	ppb	09:01:52
1	Fe 238.204 Radial†	-15.9	-31.7	-237.35	µg/L	-237.35	ppb	09:01:52
1	K 766.490 Radial†	474995.2	472121.5	313410	µg/L	313410	ppb	09:01:26
1	Mg 279.077 IEC†	-21.4	-29.6	-147.56	µg/L	-147.56	ppb	09:01:52
1	Na 589.592 Radial†	2011.8	1456.5	418.25	µg/L	418.25	ppb	09:01:32
1	Sr 421.552†	1634407.8	1625379.8	10328	µg/L	10328	ppb	09:01:26
1	Sc 361.383	1932740.7	1932740.7	99.452	%			09:03:24
1	Y 371.029	1211113.0	1211113.0	98.561	%			09:03:24
1	Ag 328.068†	-6924.7	-6907.8	5.5480	µg/L	5.5480	ppb	09:03:24
1	As 188.979†	4468.8	4492.8	10348	µg/L	10348	ppb	09:03:29
1	B 249.677†	105666.3	106133.6	5205.1	µg/L	5205.1	ppb	09:03:24
1	Ba 233.527†	518789.9	521663.9	15175	µg/L	15175	ppb	09:03:24
1	Be 313.107†	4336327.5	4356389.6	3031.3	µg/L	3031.3	ppb	09:03:13
1	Cd 226.502†	346507.1	348552.5	10271	µg/L	10271	ppb	09:03:24
1	Co 228.616†	184338.2	185399.2	10221	µg/L	10221	ppb	09:03:24
1	Cr 267.716†	1112692.1	1118908.0	25959	µg/L	25959	ppb	09:03:24
1	Cu 324.752†	2824056.2	2835953.9	21323	µg/L	21323	ppb	09:03:24
1	Mn 257.610†	2712988.7	2728132.0	10078	µg/L	10078	ppb	09:03:24
1	Mo 202.031†	81987.3	82422.0	10352	µg/L	10352	ppb	09:03:24
1	Ni 231.604†	164386.7	164957.3	10381	µg/L	10381	ppb	09:03:24
1	P 214.914†	7820.4	7661.0	16262	µg/L	16262	ppb	09:03:29
1	Pb 220.353†	91499.5	91947.9	26808	µg/L	26808	ppb	09:03:24
1	S 181.975 Axial†	9352.6	9378.6	53761	µg/L	53761	ppb	09:03:29
1	Sb 206.836†	9719.9	9751.1	10669	µg/L	10669	ppb	09:03:29
1	Se 196.026†	6716.8	6741.4	10649	µg/L	10649	ppb	09:03:29
1	SiO2†	491229.3	491658.2	103780	µg/L	103780	ppb	09:03:24
1	Si 251.611†	573236.5	576091.7	48321	µg/L	48321	ppb	09:03:24
1	Sn 189.927†	19764.2	19849.7	11586	µg/L	11586	ppb	09:03:29
1	Ti 334.940†	4080815.7	4102535.2	10232	µg/L	10232	ppb	09:03:13
1	Tl 190.801†	5917.8	5973.5	10387	µg/L	10387	ppb	09:03:29
1	U 409.014†	745.6	982.6	93.830	µg/L	93.830	ppb	09:03:24
1	V 292.402†	848005.0	852801.3	10744	µg/L	10744	ppb	09:03:24
1	Zn 213.857†	529589.9	531837.6	15425	µg/L	15425	ppb	09:03:24
2	Sc RADIAL	76398.3	76398.3	99.5	%			09:02:04
2	Al 396.153Radial†	383.5	413.6	75.539	µg/L	75.539	ppb	09:02:04
2	Ca 317.933Radial†	346.2	96.4	75.934	µg/L	75.934	ppb	09:02:24
2	Fe 238.204 Radial†	-16.4	-32.4	-248.97	µg/L	-248.97	ppb	09:02:24
2	K 766.490 Radial†	472333.0	474526.2	315010	µg/L	315010	ppb	09:01:58
2	Mg 279.077 IEC†	-21.2	-29.6	-149.21	µg/L	-149.21	ppb	09:02:24
2	Na 589.592 Radial†	1610.4	1074.4	308.52	µg/L	308.52	ppb	09:02:04
2	Sr 421.552†	1622831.1	1631224.0	10365	µg/L	10365	ppb	09:01:58
2	Sc 361.383	1932652.6	1932652.6	99.447	%			09:03:49
2	Y 371.029	1211672.3	1211672.3	98.606	%			09:03:49
2	Ag 328.068†	-6969.4	-6953.0	4.8123	µg/L	4.8123	ppb	09:03:49
2	As 188.979†	4439.6	4463.7	10280	µg/L	10280	ppb	09:03:54
2	B 249.677†	105498.2	105969.3	5196.9	µg/L	5196.9	ppb	09:03:49
2	Ba 233.527†	516150.9	519034.0	15099	µg/L	15099	ppb	09:03:49
2	Be 313.107†	4354175.9	4374535.7	3043.9	µg/L	3043.9	ppb	09:03:38
2	Cd 226.502†	344629.1	346679.9	10216	µg/L	10216	ppb	09:03:49
2	Co 228.616†	183217.0	184280.3	10159	µg/L	10159	ppb	09:03:49
2	Cr 267.716†	1105568.8	1111796.0	25794	µg/L	25794	ppb	09:03:49
2	Cu 324.752†	2816319.6	2828303.7	21266	µg/L	21266	ppb	09:03:49
2	Mn 257.610†	2698384.1	2713570.5	10025	µg/L	10025	ppb	09:03:49
2	Mo 202.031†	81663.2	82099.9	10312	µg/L	10312	ppb	09:03:49
2	Ni 231.604†	163487.2	164060.4	10325	µg/L	10325	ppb	09:03:49
2	P 214.914†	7772.3	7613.0	16151	µg/L	16151	ppb	09:03:54
2	Pb 220.353†	91105.9	91556.3	26694	µg/L	26694	ppb	09:03:49

2	S 181.975 Axial†	9354.5	9381.0	53775	µg/L	53775 ppb	09:03:54
2	Sb 206.836†	9672.2	9703.5	10617	µg/L	10617 ppb	09:03:54
2	Se 196.026†	6697.1	6721.9	10618	µg/L	10618 ppb	09:03:54
2	SiO2†	490288.7	490734.8	103580	µg/L	103580 ppb	09:03:49
2	Si 251.611†	571952.4	574826.6	48215	µg/L	48215 ppb	09:03:49
2	Sn 189.927†	19571.2	19656.6	11473	µg/L	11473 ppb	09:03:54
2	Ti 334.940†	4101225.6	4123245.4	10283	µg/L	10283 ppb	09:03:38
2	Tl 190.801†	5899.4	5955.3	10356	µg/L	10356 ppb	09:03:54
2	U 409.014†	736.2	973.2	92.933	µg/L	92.933 ppb	09:03:49
2	V 292.402†	844165.7	848979.5	10696	µg/L	10696 ppb	09:03:49
2	Zn 213.857†	527086.0	529344.1	15352	µg/L	15352 ppb	09:03:49
3	Sc RADIAL	76823.3	76823.3	100	%		09:02:36
3	Al 396.153Radial†	385.7	413.7	91.964	µg/L	91.964 ppb	09:02:36
3	Ca 317.933Radial†	343.4	91.7	72.187	µg/L	72.187 ppb	09:02:56
3	Fe 238.204 Radial†	-17.3	-33.2	-278.30	µg/L	-278.30 ppb	09:02:56
3	K 766.490 Radial†	473697.0	473262.4	314170	µg/L	314170 ppb	09:02:30
3	Mg 279.077 IEC†	-21.4	-29.7	-163.23	µg/L	-163.23 ppb	09:02:56
3	Na 589.592 Radial†	1436.2	891.2	255.91	µg/L	255.91 ppb	09:02:36
3	Sr 421.552†	1627729.2	1627093.9	10338	µg/L	10338 ppb	09:02:30
3	Sc 361.383	1940169.6	1940169.6	99.834	%		09:04:14
3	Y 371.029	1216195.3	1216195.3	98.974	%		09:04:14
3	Ag 328.068†	-6388.2	-6343.7	4.8969	µg/L	4.8969 ppb	09:04:14
3	As 188.979†	4100.8	4107.1	9459.0	µg/L	9459.0 ppb	09:04:19
3	B 249.677†	100480.1	100531.8	4928.4	µg/L	4928.4 ppb	09:04:14
3	Ba 233.527†	481468.6	482283.2	14029	µg/L	14029 ppb	09:04:14
3	Be 313.107†	4142672.2	4145717.2	2884.7	µg/L	2884.7 ppb	09:04:03
3	Cd 226.502†	321083.6	321752.6	9481.0	µg/L	9481.0 ppb	09:04:14
3	Co 228.616†	169271.1	169597.5	9348.8	µg/L	9348.8 ppb	09:04:14
3	Cr 267.716†	1003727.1	1005477.9	23328	µg/L	23328 ppb	09:04:14
3	Cu 324.752†	2606280.0	2606943.0	19601	µg/L	19601 ppb	09:04:14
3	Mn 257.610†	2495691.5	2500028.4	9235.7	µg/L	9235.7 ppb	09:04:14
3	Mo 202.031†	75653.2	75761.8	9515.8	µg/L	9515.8 ppb	09:04:14
3	Ni 231.604†	151028.3	150943.8	9499.2	µg/L	9499.2 ppb	09:04:14
3	P 214.914†	7078.4	6887.7	14573	µg/L	14573 ppb	09:04:19
3	Pb 220.353†	85783.7	85870.4	25036	µg/L	25036 ppb	09:04:14
3	S 181.975 Axial†	8675.5	8664.4	49667	µg/L	49667 ppb	09:04:19
3	Sb 206.836†	8858.1	8850.4	9687.8	µg/L	9687.8 ppb	09:04:19
3	Se 196.026†	6223.8	6221.7	9827.8	µg/L	9827.8 ppb	09:04:19
3	SiO2†	463164.4	461655.3	97443	µg/L	97443 ppb	09:04:14
3	Si 251.611†	540248.9	540842.2	45364	µg/L	45364 ppb	09:04:14
3	Sn 189.927†	17569.4	17575.1	10258	µg/L	10258 ppb	09:04:19
3	Ti 334.940†	3907150.0	3912869.3	9758.6	µg/L	9758.6 ppb	09:04:03
3	Tl 190.801†	5585.6	5618.0	9769.8	µg/L	9769.8 ppb	09:04:19
3	U 409.014†	640.2	874.2	83.485	µg/L	83.485 ppb	09:04:14
3	V 292.402†	779373.3	780790.6	9836.2	µg/L	9836.2 ppb	09:04:14
3	Zn 213.857†	489213.5	489355.2	14193	µg/L	14193 ppb	09:04:14

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1935187.6	99.578	%	0.2220				0.22%
Sc RADIAL	76813.8	100.0	%	0.53				0.53%
Y 371.029	1212993.5	98.714	%	0.2268				0.23%
Ag 328.068†	-6734.9	5.0857	µg/L	0.40256	5.0857	ppb	0.40256	7.92%
Al 396.153Radial†	424.2	88.093	µg/L	11.1350	88.093	ppb	11.1350	12.64%
As 188.979†	4354.5	10029	µg/L	494.8	10029	ppb	494.8	4.93%
QC value within limits for As 188.979 Recovery = 100.29%								
B 249.677†	104211.6	5110.1	µg/L	157.44	5110.1	ppb	157.44	3.08%
QC value within limits for B 249.677 Recovery = 102.20%								
Ba 233.527†	507660.4	14768	µg/L	640.6	14768	ppb	640.6	4.34%
QC value within limits for Ba 233.527 Recovery = 98.45%								
Be 313.107†	4292214.2	2986.6	µg/L	88.51	2986.6	ppb	88.51	2.96%
QC value within limits for Be 313.107 Recovery = 99.55%								
Ca 317.933Radial†	100.7	79.263	µg/L	9.2039	79.263	ppb	9.2039	11.61%
Cd 226.502†	338995.0	9989.1	µg/L	440.92	9989.1	ppb	440.92	4.41%
QC value within limits for Cd 226.502 Recovery = 99.89%								
Co 228.616†	179759.0	9909.4	µg/L	486.52	9909.4	ppb	486.52	4.91%
QC value within limits for Co 228.616 Recovery = 99.09%								
Cr 267.716†	1078727.3	25027	µg/L	1474.0	25027	ppb	1474.0	5.89%
QC value within limits for Cr 267.716 Recovery = 100.11%								

Cu 324.752†	2757066.9	20730 µg/L	978.0	20730 ppb	978.0	4.72%
QC value within limits for Cu 324.752 Recovery = 103.65%						
Fe 238.204 Radial†	-32.4	-254.88 µg/L	21.106	-254.88 ppb	21.106	8.28%
K 766.490 Radial†	473303.4	314200 µg/L	798.5	314200 ppb	798.5	0.25%
QC value within limits for K 766.490 Radial Recovery = 104.73%						
Mg 279.077 IEC†	-29.6	-153.33 µg/L	8.613	-153.33 ppb	8.613	5.62%
Mn 257.610†	2647243.6	9779.5 µg/L	471.76	9779.5 ppb	471.76	4.82%
QC value within limits for Mn 257.610 Recovery = 97.80%						
Mo 202.031†	80094.5	10060 µg/L	471.7	10060 ppb	471.7	4.69%
QC value within limits for Mo 202.031 Recovery = 100.60%						
Na 589.592 Radial†	1140.7	327.56 µg/L	82.827	327.56 ppb	82.827	25.29%
Ni 231.604†	159987.2	10068 µg/L	493.7	10068 ppb	493.7	4.90%
QC value within limits for Ni 231.604 Recovery = 100.68%						
P 214.914†	7387.2	15662 µg/L	945.0	15662 ppb	945.0	6.03%
QC value within limits for P 214.914 Recovery = 104.41%						
Pb 220.353†	89791.5	26179 µg/L	991.7	26179 ppb	991.7	3.79%
QC value within limits for Pb 220.353 Recovery = 104.72%						
S 181.975 Axial†	9141.3	52401 µg/L	2367.5	52401 ppb	2367.5	4.52%
QC value within limits for S 181.975 Axial Recovery = 104.80%						
Sb 206.836†	9435.0	10325 µg/L	552.0	10325 ppb	552.0	5.35%
QC value within limits for Sb 206.836 Recovery = 103.25%						
Se 196.026†	6561.7	10365 µg/L	465.4	10365 ppb	465.4	4.49%
QC value within limits for Se 196.026 Recovery = 103.65%						
SiO2†	481349.4	101600 µg/L	3601.3	101600 ppb	3601.3	3.54%
QC value within limits for SiO2 Recovery = 94.95%						
Si 251.611†	563920.2	47300 µg/L	1677.2	47300 ppb	1677.2	3.55%
QC value within limits for Si 251.611 Recovery = 94.60%						
Sn 189.927†	19027.2	11106 µg/L	736.1	11106 ppb	736.1	6.63%
QC value greater than the upper limit for Sn 189.927 Recovery = 111.06%						
Sr 421.552†	1627899.2	10344 µg/L	19.1	10344 ppb	19.1	0.18%
QC value within limits for Sr 421.552 Recovery = 103.44%						
Ti 334.940†	4046216.6	10091 µg/L	289.2	10091 ppb	289.2	2.87%
QC value within limits for Ti 334.940 Recovery = 100.91%						
Tl 190.801†	5848.9	10171 µg/L	347.7	10171 ppb	347.7	3.42%
QC value within limits for Tl 190.801 Recovery = 101.71%						
U 409.014†	943.4	90.082 µg/L	5.7313	90.082 ppb	5.7313	6.36%
V 292.402†	827523.8	10425 µg/L	510.9	10425 ppb	510.9	4.90%
QC value within limits for V 292.402 Recovery = 104.25%						
Zn 213.857†	516845.6	14990 µg/L	691.3	14990 ppb	691.3	4.61%
QC value within limits for Zn 213.857 Recovery = 99.93%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 09:04:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78693.9	78693.9	102	%			09:05:08
1	Al 396.153Radial†	7715.7	7559.9	5242.0	µg/L	5242.0	ppb	09:05:08
1	Ca 317.933Radial†	6994.7	6576.4	5178.4	µg/L	5178.4	ppb	09:05:28
1	Fe 238.204 Radial†	391.7	366.5	5272.7	µg/L	5272.7	ppb	09:05:28
1	K 766.490 Radial†	8529.6	7914.4	5253.9	µg/L	5253.9	ppb	09:05:08
1	Mg 279.077 IEC†	506.3	485.9	5299.1	µg/L	5299.1	ppb	09:05:28
1	Na 589.592 Radial†	37583.6	36143.5	10379	µg/L	10379	ppb	09:05:08
1	Sr 421.552†	83694.1	81143.1	515.58	µg/L	515.58	ppb	09:05:08
1	Sc 361.383	1956250.0	1956250.0	100.66	%			09:06:32
1	Y 371.029	1234151.7	1234151.7	100.44	%			09:06:32
1	Ag 328.068†	57118.7	56798.4	533.32	µg/L	533.32	ppb	09:06:37
1	As 188.979†	240.3	238.2	548.69	µg/L	548.69	ppb	09:06:58
1	B 249.677†	11208.7	11019.8	534.23	µg/L	534.23	ppb	09:06:37
1	Ba 233.527†	18536.7	18429.4	536.40	µg/L	536.40	ppb	09:06:37
1	Be 313.107†	762448.7	753598.6	524.84	µg/L	524.84	ppb	09:06:32
1	Cd 226.502†	18254.0	18269.5	537.74	µg/L	537.74	ppb	09:06:37
1	Co 228.616†	9754.4	9735.3	536.71	µg/L	536.71	ppb	09:06:37
1	Cr 267.716†	23332.8	23262.2	539.89	µg/L	539.89	ppb	09:06:37
1	Cu 324.752†	75951.0	71783.6	540.46	µg/L	540.46	ppb	09:06:37
1	Mn 257.610†	143269.3	142517.2	526.98	µg/L	526.98	ppb	09:06:37
1	Mo 202.031†	4304.9	4259.4	535.18	µg/L	535.18	ppb	09:06:58
1	Ni 231.604†	8936.5	8542.3	537.64	µg/L	537.64	ppb	09:06:37
1	P 214.914†	1336.6	1125.4	2642.7	µg/L	2642.7	ppb	09:06:58
1	Pb 220.353†	1950.8	1882.0	549.00	µg/L	549.00	ppb	09:06:58
1	S 181.975 Axial†	206.7	179.8	1030.7	µg/L	1030.7	ppb	09:06:58
1	Sb 206.836†	528.0	502.2	558.15	µg/L	558.15	ppb	09:06:58
1	Se 196.026†	349.1	334.3	547.47	µg/L	547.47	ppb	09:06:58
1	SiO2†	29873.8	27398.7	5783.1	µg/L	5783.1	ppb	09:06:37
1	Si 251.611†	32745.1	32225.4	2703.0	µg/L	2703.0	ppb	09:06:37
1	Sn 189.927†	976.8	947.0	555.37	µg/L	555.37	ppb	09:06:58
1	Ti 334.940†	212957.9	210784.7	525.36	µg/L	525.36	ppb	09:06:32
1	Tl 190.801†	286.2	307.4	534.02	µg/L	534.02	ppb	09:06:58
1	U 409.014†	5430.7	5627.9	536.02	µg/L	536.02	ppb	09:06:37
1	V 292.402†	43322.0	43159.4	542.89	µg/L	542.89	ppb	09:06:37
1	Zn 213.857†	19328.4	18530.1	536.42	µg/L	536.42	ppb	09:06:37
2	Sc RADIAL	78628.4	78628.4	102	%			09:05:34
2	Al 396.153Radial†	7730.9	7581.0	5256.7	µg/L	5256.7	ppb	09:05:34
2	Ca 317.933Radial†	7000.4	6587.7	5187.3	µg/L	5187.3	ppb	09:05:54
2	Fe 238.204 Radial†	390.1	365.2	5254.9	µg/L	5254.9	ppb	09:05:54
2	K 766.490 Radial†	8477.0	7870.0	5224.4	µg/L	5224.4	ppb	09:05:34
2	Mg 279.077 IEC†	507.6	487.7	5318.2	µg/L	5318.2	ppb	09:05:54
2	Na 589.592 Radial†	37631.9	36221.3	10401	µg/L	10401	ppb	09:05:34
2	Sr 421.552†	83781.9	81296.9	516.55	µg/L	516.55	ppb	09:05:34
2	Sc 361.383	1951423.4	1951423.4	100.41	%			09:07:05
2	Y 371.029	1230214.9	1230214.9	100.12	%			09:07:05
2	Ag 328.068†	56712.4	56534.1	530.84	µg/L	530.84	ppb	09:07:10
2	As 188.979†	243.2	241.6	556.56	µg/L	556.56	ppb	09:07:31
2	B 249.677†	11077.9	10917.1	529.24	µg/L	529.24	ppb	09:07:10
2	Ba 233.527†	18368.2	18307.1	532.84	µg/L	532.84	ppb	09:07:10
2	Be 313.107†	757466.2	750510.0	522.69	µg/L	522.69	ppb	09:07:05
2	Cd 226.502†	18085.8	18146.8	534.13	µg/L	534.13	ppb	09:07:10
2	Co 228.616†	9682.5	9687.6	534.08	µg/L	534.08	ppb	09:07:10
2	Cr 267.716†	23195.8	23183.1	538.06	µg/L	538.06	ppb	09:07:10
2	Cu 324.752†	75280.8	71302.8	536.84	µg/L	536.84	ppb	09:07:10
2	Mn 257.610†	141996.2	141601.4	523.59	µg/L	523.59	ppb	09:07:10
2	Mo 202.031†	4296.0	4261.2	535.41	µg/L	535.41	ppb	09:07:31
2	Ni 231.604†	8866.7	8494.8	534.65	µg/L	534.65	ppb	09:07:10
2	P 214.914†	1346.1	1138.0	2673.4	µg/L	2673.4	ppb	09:07:31
2	Pb 220.353†	1933.0	1869.1	545.25	µg/L	545.25	ppb	09:07:31

2	S 181.975 Axial†	210.6	184.2	1056.0 µg/L	1056.0 ppb	09:07:31
2	Sb 206.836†	518.0	493.5	548.51 µg/L	548.51 ppb	09:07:31
2	Se 196.026†	357.9	344.0	562.70 µg/L	562.70 ppb	09:07:31
2	SiO2†	29628.3	27227.6	5747.0 µg/L	5747.0 ppb	09:07:10
2	Si 251.611†	32387.4	31949.6	2679.8 µg/L	2679.8 ppb	09:07:10
2	Sn 189.927†	971.8	944.4	553.86 µg/L	553.86 ppb	09:07:31
2	Ti 334.940†	211657.4	210012.8	523.43 µg/L	523.43 ppb	09:07:05
2	Tl 190.801†	293.8	315.7	548.37 µg/L	548.37 ppb	09:07:31
2	U 409.014†	5307.2	5518.4	525.56 µg/L	525.56 ppb	09:07:10
2	V 292.402†	43008.7	42953.9	540.32 µg/L	540.32 ppb	09:07:10
2	Zn 213.857†	19115.6	18365.6	531.64 µg/L	531.64 ppb	09:07:10
3	Sc RADIAL	78334.2	78334.2	102 %		09:06:00
3	Al 396.153Radial†	7682.2	7561.6	5244.5 µg/L	5244.5 ppb	09:06:00
3	Ca 317.933Radial†	6952.7	6566.6	5170.7 µg/L	5170.7 ppb	09:06:20
3	Fe 238.204 Radial†	390.7	367.2	5283.2 µg/L	5283.2 ppb	09:06:20
3	K 766.490 Radial†	8491.9	7915.7	5254.7 µg/L	5254.7 ppb	09:06:00
3	Mg 279.077 IEC†	506.8	488.6	5327.8 µg/L	5327.8 ppb	09:06:20
3	Na 589.592 Radial†	37376.2	36108.6	10369 µg/L	10369 ppb	09:06:00
3	Sr 421.552†	83228.1	81061.3	515.06 µg/L	515.06 ppb	09:06:00
3	Sc 361.383	1954344.2	1954344.2	100.56 %		09:07:37
3	Y 371.029	1232547.2	1232547.2	100.31 %		09:07:37
3	Ag 328.068†	55522.7	55266.7	518.85 µg/L	518.85 ppb	09:07:43
3	As 188.979†	222.0	220.2	507.20 µg/L	507.20 ppb	09:08:04
3	B 249.677†	10778.7	10603.1	513.89 µg/L	513.89 ppb	09:07:43
3	Ba 233.527†	17676.3	17591.8	512.01 µg/L	512.01 ppb	09:07:43
3	Be 313.107†	742066.5	734069.2	511.24 µg/L	511.24 ppb	09:07:37
3	Cd 226.502†	17397.3	17435.3	513.16 µg/L	513.16 ppb	09:07:43
3	Co 228.616†	9218.3	9211.6	507.78 µg/L	507.78 ppb	09:07:43
3	Cr 267.716†	21764.3	21725.2	504.22 µg/L	504.22 ppb	09:07:43
3	Cu 324.752†	72344.7	68271.1	514.05 µg/L	514.05 ppb	09:07:43
3	Mn 257.610†	135691.0	135120.2	499.65 µg/L	499.65 ppb	09:07:43
3	Mo 202.031†	3798.1	3759.6	472.41 µg/L	472.41 ppb	09:08:04
3	Ni 231.604†	8509.9	8126.8	511.50 µg/L	511.50 ppb	09:07:43
3	P 214.914†	1230.0	1020.6	2393.7 µg/L	2393.7 ppb	09:08:04
3	Pb 220.353†	1759.6	1693.8	494.03 µg/L	494.03 ppb	09:08:04
3	S 181.975 Axial†	198.0	171.4	982.52 µg/L	982.52 ppb	09:08:04
3	Sb 206.836†	471.8	446.8	496.20 µg/L	496.20 ppb	09:08:04
3	Se 196.026†	327.5	313.3	514.22 µg/L	514.22 ppb	09:08:04
3	SiO2†	28770.9	26330.9	5557.7 µg/L	5557.7 ppb	09:07:43
3	Si 251.611†	31354.5	30874.3	2589.6 µg/L	2589.6 ppb	09:07:43
3	Sn 189.927†	851.6	823.4	483.25 µg/L	483.25 ppb	09:08:04
3	Ti 334.940†	206881.9	204949.1	510.80 µg/L	510.80 ppb	09:07:37
3	Tl 190.801†	273.7	295.2	512.95 µg/L	512.95 ppb	09:08:04
3	U 409.014†	4988.0	5193.1	494.52 µg/L	494.52 ppb	09:07:43
3	V 292.402†	40921.7	40814.5	513.12 µg/L	513.12 ppb	09:07:43
3	Zn 213.857†	18329.0	17555.0	508.14 µg/L	508.14 ppb	09:07:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1954005.9	100.55	%	0.125				0.12%
Sc RADIAL	78552.2	102	%	0.2				0.24%
Y 371.029	1232304.6	100.29	%	0.161				0.16%
Ag 328.068†	56199.8	527.67	µg/L	7.738	527.67	ppb	7.738	1.47%
QC value within limits for Ag 328.068 Recovery = 105.53%								
Al 396.153Radial†	7567.5	5247.7	µg/L	7.86	5247.7	ppb	7.86	0.15%
QC value within limits for Al 396.153Radial Recovery = 104.95%								
As 188.979†	233.3	537.49	µg/L	26.520	537.49	ppb	26.520	4.93%
QC value within limits for As 188.979 Recovery = 107.50%								
B 249.677†	10846.7	525.79	µg/L	10.597	525.79	ppb	10.597	2.02%
QC value within limits for B 249.677 Recovery = 105.16%								
Ba 233.527†	18109.4	527.09	µg/L	13.175	527.09	ppb	13.175	2.50%
QC value within limits for Ba 233.527 Recovery = 105.42%								
Be 313.107†	746059.2	519.59	µg/L	7.311	519.59	ppb	7.311	1.41%
QC value within limits for Be 313.107 Recovery = 103.92%								
Ca 317.933Radial†	6576.9	5178.8	µg/L	8.30	5178.8	ppb	8.30	0.16%
QC value within limits for Ca 317.933Radial Recovery = 103.58%								
Cd 226.502†	17950.5	528.34	µg/L	13.275	528.34	ppb	13.275	2.51%
QC value within limits for Cd 226.502 Recovery = 105.67%								
Co 228.616†	9544.9	526.19	µg/L	15.998	526.19	ppb	15.998	3.04%

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   QC value within limits for Co 228.616  Recovery = 105.24%
Cr 267.716†          22723.5      527.39 µg/L       20.084      527.39 ppb        20.084   3.81%
   QC value within limits for Cr 267.716  Recovery = 105.48%
Cu 324.752†          70452.5      530.45 µg/L       14.318      530.45 ppb        14.318   2.70%
   QC value within limits for Cu 324.752  Recovery = 106.09%
Fe 238.204 Radial†     366.3      5270.3 µg/L        14.30      5270.3 ppb         14.30   0.27%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.41%
K 766.490 Radial†     7900.1      5244.3 µg/L        17.29      5244.3 ppb         17.29   0.33%
   QC value within limits for K 766.490 Radial  Recovery = 104.89%
Mg 279.077 IEC†        487.4      5315.0 µg/L        14.63      5315.0 ppb         14.63   0.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.30%
Mn 257.610†         139746.3      516.74 µg/L       14.896      516.74 ppb        14.896   2.88%
   QC value within limits for Mn 257.610  Recovery = 103.35%
Mo 202.031†          4093.4      514.33 µg/L       36.307      514.33 ppb        36.307   7.06%
   QC value within limits for Mo 202.031  Recovery = 102.87%
Na 589.592 Radial†   36157.8       10383 µg/L         16.6       10383 ppb          16.6   0.16%
   QC value within limits for Na 589.592 Radial  Recovery = 103.83%
Ni 231.604†          8388.0      527.93 µg/L       14.311      527.93 ppb        14.311   2.71%
   QC value within limits for Ni 231.604  Recovery = 105.59%
P 214.914†           1094.7      2569.9 µg/L       153.41      2569.9 ppb        153.41   5.97%
   QC value within limits for P 214.914  Recovery = 102.80%
Pb 220.353†          1815.0      529.43 µg/L       30.711      529.43 ppb        30.711   5.80%
   QC value within limits for Pb 220.353  Recovery = 105.89%
S 181.975 Axial†       178.5      1023.1 µg/L        37.34      1023.1 ppb         37.34   3.65%
   QC value within limits for S 181.975 Axial  Recovery = 102.31%
Sb 206.836†            480.8      534.29 µg/L       33.337      534.29 ppb        33.337   6.24%
   QC value within limits for Sb 206.836  Recovery = 106.86%
Se 196.026†            330.5      541.46 µg/L       24.795      541.46 ppb        24.795   4.58%
   QC value within limits for Se 196.026  Recovery = 108.29%
SiO2†               26985.7      5696.0 µg/L       121.05      5696.0 ppb        121.05   2.13%
   QC value within limits for SiO2  Recovery = 106.52%
Si 251.611†         31683.1      2657.5 µg/L        59.88      2657.5 ppb         59.88   2.25%
   QC value within limits for Si 251.611  Recovery = 106.30%
Sn 189.927†            904.9      530.83 µg/L       41.209      530.83 ppb        41.209   7.76%
   QC value within limits for Sn 189.927  Recovery = 106.17%
Sr 421.552†         81167.1      515.73 µg/L        0.760      515.73 ppb         0.760   0.15%
   QC value within limits for Sr 421.552  Recovery = 103.15%
Ti 334.940†        208582.2      519.86 µg/L        7.907      519.86 ppb         7.907   1.52%
   QC value within limits for Ti 334.940  Recovery = 103.97%
Tl 190.801†            306.1      531.78 µg/L       17.814      531.78 ppb        17.814   3.35%
   QC value within limits for Tl 190.801  Recovery = 106.36%
U 409.014†            5446.5      518.70 µg/L       21.585      518.70 ppb        21.585   4.16%
   QC value within limits for U 409.014  Recovery = 103.74%
V 292.402†          42309.3      532.11 µg/L       16.495      532.11 ppb        16.495   3.10%
   QC value within limits for V 292.402  Recovery = 106.42%
Zn 213.857†         18150.2      525.40 µg/L       15.134      525.40 ppb        15.134   2.88%
   QC value within limits for Zn 213.857  Recovery = 105.08%
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 09:08:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76637.5	76637.5	99.8	%			09:08:46
1	Al 396.153Radial†	40.0	68.1	47.288	µg/L	47.288	ppb	09:08:46
1	Ca 317.933Radial†	296.6	45.7	35.952	µg/L	35.952	ppb	09:09:07
1	Fe 238.204 Radial†	20.8	5.0	71.322	µg/L	71.322	ppb	09:09:07
1	K 766.490 Radial†	543.6	132.9	88.238	µg/L	88.238	ppb	09:08:46
1	Mg 279.077 IEC†	13.6	5.3	57.684	µg/L	57.684	ppb	09:09:07
1	Na 589.592 Radial†	797.0	253.9	72.924	µg/L	72.924	ppb	09:08:46
1	Sr 421.552†	584.1	27.8	0.1765	µg/L	0.1765	ppb	09:08:46
1	Sc 361.383	1951790.1	1951790.1	100.43	%			09:10:09
1	Y 371.029	1235152.2	1235152.2	100.52	%			09:10:09
1	Ag 328.068†	2.1	57.2	0.5382	µg/L	0.5382	ppb	09:10:14
1	As 188.979†	1.0	0.4	0.9179	µg/L	0.9179	ppb	09:10:35
1	B 249.677†	203.4	87.4	4.2139	µg/L	4.2139	ppb	09:10:35
1	Ba 233.527†	-1.1	13.4	0.3894	µg/L	0.3894	ppb	09:10:35
1	Be 313.107†	4022.6	165.9	0.1154	µg/L	0.1154	ppb	09:10:14
1	Cd 226.502†	-121.0	14.9	0.4322	µg/L	0.4322	ppb	09:10:35
1	Co 228.616†	-45.4	-0.2	-0.0123	µg/L	-0.0123	ppb	09:10:35
1	Cr 267.716†	-49.4	33.6	0.7799	µg/L	0.7799	ppb	09:10:14
1	Cu 324.752†	4520.1	832.4	6.2687	µg/L	6.2687	ppb	09:10:14
1	Mn 257.610†	-141.1	49.0	0.1881	µg/L	0.1881	ppb	09:10:35
1	Mo 202.031†	27.9	10.6	1.3290	µg/L	1.3290	ppb	09:10:35
1	Ni 231.604†	347.8	10.9	0.6862	µg/L	0.6862	ppb	09:10:35
1	P 214.914†	210.4	7.0	16.223	µg/L	16.223	ppb	09:10:35
1	Pb 220.353†	69.9	13.7	3.9800	µg/L	3.9800	ppb	09:10:35
1	S 181.975 Axial†	26.7	1.1	6.3957	µg/L	6.3957	ppb	09:10:35
1	Sb 206.836†	28.2	5.7	6.3439	µg/L	6.3439	ppb	09:10:35
1	Se 196.026†	7.9	-4.6	-6.9660	µg/L	-6.9660	ppb	09:10:35
1	SiO2†	2325.4	36.7	7.7402	µg/L	7.7402	ppb	09:10:14
1	Si 251.611†	356.6	50.6	4.2432	µg/L	4.2432	ppb	09:10:35
1	Sn 189.927†	31.3	7.8	4.5551	µg/L	4.5551	ppb	09:10:35
1	Ti 334.940†	1007.9	229.9	0.5693	µg/L	0.5693	ppb	09:10:14
1	Tl 190.801†	-21.7	1.5	2.5594	µg/L	2.5594	ppb	09:10:35
1	U 409.014†	-254.4	-20.4	-1.9556	µg/L	-1.9556	ppb	09:10:14
1	V 292.402†	-114.8	7.9	0.1114	µg/L	0.1114	ppb	09:10:14
1	Zn 213.857†	734.5	60.0	1.7298	µg/L	1.7298	ppb	09:10:35
2	Sc RADIAL	76515.4	76515.4	99.6	%			09:09:12
2	Al 396.153Radial†	37.5	65.6	45.585	µg/L	45.585	ppb	09:09:12
2	Ca 317.933Radial†	303.2	52.8	41.567	µg/L	41.567	ppb	09:09:33
2	Fe 238.204 Radial†	18.3	2.5	35.821	µg/L	35.821	ppb	09:09:33
2	K 766.490 Radial†	523.6	113.7	75.473	µg/L	75.473	ppb	09:09:12
2	Mg 279.077 IEC†	16.9	8.6	94.168	µg/L	94.168	ppb	09:09:33
2	Na 589.592 Radial†	769.7	227.8	65.422	µg/L	65.422	ppb	09:09:12
2	Sr 421.552†	610.6	55.4	0.3517	µg/L	0.3517	ppb	09:09:12
2	Sc 361.383	1950300.8	1950300.8	100.36	%			09:10:41
2	Y 371.029	1233736.8	1233736.8	100.40	%			09:10:41
2	Ag 328.068†	13.7	68.8	0.6471	µg/L	0.6471	ppb	09:10:46
2	As 188.979†	2.2	1.6	3.7077	µg/L	3.7077	ppb	09:11:07
2	B 249.677†	202.1	86.2	4.1762	µg/L	4.1762	ppb	09:11:07
2	Ba 233.527†	-0.8	13.7	0.3989	µg/L	0.3989	ppb	09:11:07
2	Be 313.107†	4013.9	160.2	0.1114	µg/L	0.1114	ppb	09:10:46
2	Cd 226.502†	-123.8	12.1	0.3519	µg/L	0.3519	ppb	09:11:07
2	Co 228.616†	-39.1	6.0	0.3338	µg/L	0.3338	ppb	09:11:07
2	Cr 267.716†	-81.3	1.8	0.0410	µg/L	0.0410	ppb	09:10:46
2	Cu 324.752†	4512.8	828.6	6.2349	µg/L	6.2349	ppb	09:10:46
2	Mn 257.610†	-135.3	54.7	0.2031	µg/L	0.2031	ppb	09:11:07
2	Mo 202.031†	27.4	10.1	1.2680	µg/L	1.2680	ppb	09:11:07
2	Ni 231.604†	349.8	13.1	0.8265	µg/L	0.8265	ppb	09:11:07
2	P 214.914†	209.3	6.1	13.870	µg/L	13.870	ppb	09:11:07
2	Pb 220.353†	62.7	6.5	1.8977	µg/L	1.8977	ppb	09:11:07

2	S 181.975 Axial†	23.1	-2.5	-14.555 µg/L	-14.555 ppb	09:11:07
2	Sb 206.836†	28.7	6.2	6.9314 µg/L	6.9314 ppb	09:11:07
2	Se 196.026†	8.2	-4.3	-6.6826 µg/L	-6.6826 ppb	09:11:07
2	SiO2†	2341.5	54.4	11.492 µg/L	11.492 ppb	09:10:46
2	Si 251.611†	373.7	67.8	5.6907 µg/L	5.6907 ppb	09:11:07
2	Sn 189.927†	27.7	4.2	2.4904 µg/L	2.4904 ppb	09:11:07
2	Ti 334.940†	993.1	215.9	0.5318 µg/L	0.5318 ppb	09:10:46
2	Tl 190.801†	-15.5	7.7	13.199 µg/L	13.199 ppb	09:11:07
2	U 409.014†	-306.1	-72.0	-6.8813 µg/L	-6.8813 ppb	09:10:46
2	V 292.402†	-76.1	46.3	0.5804 µg/L	0.5804 ppb	09:10:46
2	Zn 213.857†	740.7	66.8	1.9263 µg/L	1.9263 ppb	09:11:07
3	Sc RADIAL	76796.8	76796.8	100.0 %		09:09:38
3	Al 396.153Radial†	26.4	54.3	37.762 µg/L	37.762 ppb	09:09:38
3	Ca 317.933Radial†	308.6	57.1	44.937 µg/L	44.937 ppb	09:09:59
3	Fe 238.204 Radial†	19.7	3.8	55.046 µg/L	55.046 ppb	09:09:59
3	K 766.490 Radial†	539.9	128.1	85.040 µg/L	85.040 ppb	09:09:38
3	Mg 279.077 IEC†	14.4	6.1	66.442 µg/L	66.442 ppb	09:09:59
3	Na 589.592 Radial†	735.8	191.1	54.881 µg/L	54.881 ppb	09:09:38
3	Sr 421.552†	560.3	2.8	0.0178 µg/L	0.0178 ppb	09:09:38
3	Sc 361.383	1944171.2	1944171.2	100.04 %		09:11:13
3	Y 371.029	1230417.2	1230417.2	100.13 %		09:11:13
3	Ag 328.068†	-32.5	22.6	0.2158 µg/L	0.2158 ppb	09:11:18
3	As 188.979†	1.5	1.0	2.2759 µg/L	2.2759 ppb	09:11:39
3	B 249.677†	201.2	86.0	4.1542 µg/L	4.1542 ppb	09:11:39
3	Ba 233.527†	-4.7	9.8	0.2865 µg/L	0.2865 ppb	09:11:39
3	Be 313.107†	3952.3	111.3	0.0773 µg/L	0.0773 ppb	09:11:18
3	Cd 226.502†	-129.3	6.2	0.1773 µg/L	0.1773 ppb	09:11:39
3	Co 228.616†	-34.7	10.3	0.5699 µg/L	0.5699 ppb	09:11:39
3	Cr 267.716†	-56.3	26.5	0.6144 µg/L	0.6144 ppb	09:11:18
3	Cu 324.752†	4496.9	826.8	6.2246 µg/L	6.2246 ppb	09:11:18
3	Mn 257.610†	-135.3	54.3	0.2051 µg/L	0.2051 ppb	09:11:39
3	Mo 202.031†	16.8	-0.4	-0.0510 µg/L	-0.0510 ppb	09:11:39
3	Ni 231.604†	349.6	14.0	0.8851 µg/L	0.8851 ppb	09:11:39
3	P 214.914†	208.0	5.4	12.243 µg/L	12.243 ppb	09:11:39
3	Pb 220.353†	62.8	6.8	1.9727 µg/L	1.9727 ppb	09:11:39
3	S 181.975 Axial†	26.3	0.8	4.4048 µg/L	4.4048 ppb	09:11:39
3	Sb 206.836†	24.6	2.2	2.4546 µg/L	2.4546 ppb	09:11:39
3	Se 196.026†	7.8	-4.6	-7.0764 µg/L	-7.0764 ppb	09:11:39
3	SiO2†	2330.6	50.9	10.741 µg/L	10.741 ppb	09:11:18
3	Si 251.611†	359.9	55.2	4.6305 µg/L	4.6305 ppb	09:11:39
3	Sn 189.927†	26.2	2.8	1.6375 µg/L	1.6375 ppb	09:11:39
3	Ti 334.940†	968.8	194.7	0.4811 µg/L	0.4811 ppb	09:11:18
3	Tl 190.801†	-23.6	-0.6	-0.9631 µg/L	-0.9631 ppb	09:11:39
3	U 409.014†	-195.0	38.1	3.6229 µg/L	3.6229 ppb	09:11:18
3	V 292.402†	-104.5	17.7	0.2278 µg/L	0.2278 ppb	09:11:18
3	Zn 213.857†	726.1	54.5	1.5683 µg/L	1.5683 ppb	09:11:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1948754.0	100.28	%	0.208				0.21%
Sc RADIAL	76649.9	99.8	%	0.18				0.18%
Y 371.029	1233102.0	100.35	%	0.198				0.20%
Ag 328.068†	49.5	0.4671	µg/L	0.22427	0.4671	ppb	0.22427	48.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	62.7	43.545	µg/L	5.0804	43.545	ppb	5.0804	11.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.0	2.3005	µg/L	1.39510	2.3005	ppb	1.39510	60.64%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	86.5	4.1814	µg/L	0.03018	4.1814	ppb	0.03018	0.72%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.3	0.3583	µg/L	0.06229	0.3583	ppb	0.06229	17.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	145.8	0.1014	µg/L	0.02091	0.1014	ppb	0.02091	20.62%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	51.8	40.819	µg/L	4.5392	40.819	ppb	4.5392	11.12%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	11.1	0.3205	µg/L	0.13033	0.3205	ppb	0.13033	40.67%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	5.4	0.2971	µg/L	0.29283	0.2971	ppb	0.29283	98.56%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                20.6      0.4785 µg/L       0.38776      0.4785 ppb        0.38776  81.04%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               829.3      6.2427 µg/L       0.02305      6.2427 ppb        0.02305   0.37%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          3.8      54.063 µg/L       17.7709      54.063 ppb        17.7709  32.87%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         124.9      82.917 µg/L        6.6424      82.917 ppb         6.6424   8.01%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             6.7      72.765 µg/L       19.0462      72.765 ppb        19.0462  26.18%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                52.6      0.1988 µg/L       0.00927      0.1988 ppb        0.00927   4.66%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.7      0.8487 µg/L       0.77971      0.8487 ppb        0.77971  91.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        224.3      64.409 µg/L        9.0643      64.409 ppb         9.0643  14.07%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                12.7      0.7992 µg/L       0.10221      0.7992 ppb        0.10221  12.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  6.2      14.112 µg/L        2.0010      14.112 ppb         2.0010  14.18%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 9.0      2.6168 µg/L       1.18120      2.6168 ppb        1.18120  45.14%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.2     -1.2513 µg/L      11.56387     -1.2513 ppb       11.56387 924.12%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.7      5.2433 µg/L       2.43288      5.2433 ppb        2.43288  46.40%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.5     -6.9084 µg/L       0.20313     -6.9084 ppb        0.20313   2.94%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      47.3      9.9912 µg/L       1.98529      9.9912 ppb        1.98529  19.87%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                57.9      4.8548 µg/L       0.74938      4.8548 ppb        0.74938  15.44%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.9      2.8943 µg/L       1.50015      2.8943 ppb        1.50015  51.83%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                28.6      0.1820 µg/L       0.16704      0.1820 ppb        0.16704  91.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               213.5      0.5274 µg/L       0.04430      0.5274 ppb        0.04430   8.40%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.9      4.9318 µg/L       7.37311      4.9318 ppb        7.37311 149.50%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -18.1     -1.7380 µg/L       5.25551     -1.7380 ppb        5.25551 302.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 24.0      0.3065 µg/L       0.24422      0.3065 ppb        0.24422  79.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                60.4      1.7414 µg/L       0.17927      1.7414 ppb        0.17927  10.29%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 1/27/2010 09:16:48 **Plasma On Time: 1/25/2010 05:31:26**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\012710.sif
Batch ID:
Results Data Set: 012710
Results Library: c:\pe\optima1\Results\Results.mdb

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Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 1/27/2010 07:53:54**
IEC File: 011510.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 113**
Sample ID: LR2 **Date Collected: 1/27/2010 09:16:50**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76115.4	76115.4	99.1	%			09:17:25
1	Al 396.153Radial†	-22.0	5.8	4.0147	µg/L	4.0147	ppb	09:17:25
1	Ca 317.933Radial†	278.7	29.7	23.352	µg/L	23.352	ppb	09:17:45
1	Fe 238.204 Radial†	17.2	1.5	21.573	µg/L	21.573	ppb	09:17:45

1	K 766.490 Radial†	477.2	69.6	46.219 µg/L	46.219 ppb	09:17:25
1	Mg 279.077 IEC†	14.7	6.5	71.310 µg/L	71.310 ppb	09:17:45
1	Na 589.592 Radial†	519.2	-20.9	-6.0136 µg/L	-6.0136 ppb	09:17:25
1	Sr 421.552†	561.1	8.6	0.0549 µg/L	0.0549 ppb	09:17:25
1	Sc 361.383	1953413.1	1953413.1	100.52 %		09:18:47
1	Y 371.029	1235150.9	1235150.9	100.52 %		09:18:47
1	Ag 328.068†	-39.1	16.1	0.1510 µg/L	0.1510 ppb	09:18:52
1	As 188.979†	-1.8	-2.4	-5.4626 µg/L	-5.4626 ppb	09:19:13
1	B 249.677†	149.2	33.3	1.6073 µg/L	1.6073 ppb	09:19:13
1	Ba 233.527†	-20.9	-6.2	-0.1815 µg/L	-0.1815 ppb	09:19:13
1	Be 313.107†	3931.8	72.2	0.0502 µg/L	0.0502 ppb	09:18:52
1	Cd 226.502†	-124.8	11.3	0.3310 µg/L	0.3310 ppb	09:19:13
1	Co 228.616†	-48.4	-3.2	-0.1749 µg/L	-0.1749 ppb	09:19:13
1	Cr 267.716†	-74.7	8.5	0.1967 µg/L	0.1967 ppb	09:18:52
1	Cu 324.752†	4255.1	565.0	4.2514 µg/L	4.2514 ppb	09:18:52
1	Mn 257.610†	-203.5	-13.0	-0.0480 µg/L	-0.0480 ppb	09:19:13
1	Mo 202.031†	15.5	-1.8	-0.2240 µg/L	-0.2240 ppb	09:19:13
1	Ni 231.604†	339.5	2.3	0.1461 µg/L	0.1461 ppb	09:19:13
1	P 214.914†	172.0	-31.4	6.8946 µg/L	6.8946 ppb	09:19:13
1	Pb 220.353†	63.6	7.3	2.1386 µg/L	2.1386 ppb	09:19:13
1	S 181.975 Axial†	23.5	-2.1	-11.958 µg/L	-11.958 ppb	09:19:13
1	Sb 206.836†	8.3	-14.2	-15.711 µg/L	-15.711 ppb	09:19:13
1	Se 196.026†	16.6	4.1	6.5763 µg/L	6.5763 ppb	09:19:13
1	SiO2†	2441.1	149.8	31.626 µg/L	31.626 ppb	09:18:52
1	Si 251.611†	508.5	201.4	16.892 µg/L	16.892 ppb	09:19:13
1	Sn 189.927†	9608.7	9536.0	5566.1 µg/L	5566.1 ppb	09:18:52
1	Ti 334.940†	875.9	97.8	0.2386 µg/L	0.2386 ppb	09:18:52
1	Tl 190.801†	-23.5	-0.3	-0.5241 µg/L	-0.5241 ppb	09:19:13
1	U 409.014†	-308.8	-74.2	-7.0874 µg/L	-7.0874 ppb	09:18:52
1	V 292.402†	-133.2	-10.4	-0.1362 µg/L	-0.1362 ppb	09:18:52
1	Zn 213.857†	689.6	14.7	0.4166 µg/L	0.4166 ppb	09:19:13
2	Sc RADIAL	75953.1	75953.1	98.9 %		09:17:50
2	Al 396.153Radial†	15.8	43.9	30.534 µg/L	30.534 ppb	09:17:50
2	Ca 317.933Radial†	271.4	22.9	18.007 µg/L	18.007 ppb	09:18:11
2	Fe 238.204 Radial†	16.4	0.7	10.344 µg/L	10.344 ppb	09:18:11
2	K 766.490 Radial†	451.5	44.6	29.618 µg/L	29.618 ppb	09:17:50
2	Mg 279.077 IEC†	12.0	3.8	41.170 µg/L	41.170 ppb	09:18:11
2	Na 589.592 Radial†	518.8	-20.2	-5.7952 µg/L	-5.7952 ppb	09:17:50
2	Sr 421.552†	559.6	8.3	0.0529 µg/L	0.0529 ppb	09:17:50
2	Sc 361.383	1955574.6	1955574.6	100.63 %		09:19:19
2	Y 371.029	1236232.4	1236232.4	100.60 %		09:19:19
2	Ag 328.068†	-9.5	45.7	0.4254 µg/L	0.4254 ppb	09:19:24
2	As 188.979†	-3.0	-3.5	-8.0777 µg/L	-8.0777 ppb	09:19:45
2	B 249.677†	146.9	30.8	1.4923 µg/L	1.4923 ppb	09:19:45
2	Ba 233.527†	-12.6	2.0	0.0585 µg/L	0.0585 ppb	09:19:45
2	Be 313.107†	3877.2	13.6	0.0093 µg/L	0.0093 ppb	09:19:24
2	Cd 226.502†	-129.7	6.5	0.1911 µg/L	0.1911 ppb	09:19:45
2	Co 228.616†	-49.2	-3.9	-0.2140 µg/L	-0.2140 ppb	09:19:45
2	Cr 267.716†	-68.7	14.5	0.3366 µg/L	0.3366 ppb	09:19:24
2	Cu 324.752†	4236.3	541.7	4.0742 µg/L	4.0742 ppb	09:19:24
2	Mn 257.610†	-206.1	-15.4	-0.0570 µg/L	-0.0570 ppb	09:19:45
2	Mo 202.031†	15.1	-2.1	-0.2687 µg/L	-0.2687 ppb	09:19:45
2	Ni 231.604†	337.8	0.3	0.0175 µg/L	0.0175 ppb	09:19:45
2	P 214.914†	159.5	-44.0	-24.800 µg/L	-24.800 ppb	09:19:45
2	Pb 220.353†	61.9	5.6	1.6352 µg/L	1.6352 ppb	09:19:45
2	S 181.975 Axial†	23.2	-2.4	-13.854 µg/L	-13.854 ppb	09:19:45
2	Sb 206.836†	7.9	-14.5	-16.099 µg/L	-16.099 ppb	09:19:45
2	Se 196.026†	4.3	-8.1	-12.778 µg/L	-12.778 ppb	09:19:45
2	SiO2†	2461.6	167.5	35.346 µg/L	35.346 ppb	09:19:24
2	Si 251.611†	527.6	219.8	18.439 µg/L	18.439 ppb	09:19:45
2	Sn 189.927†	9449.2	9366.9	5467.4 µg/L	5467.4 ppb	09:19:24
2	Ti 334.940†	950.1	170.5	0.4223 µg/L	0.4223 ppb	09:19:24
2	Tl 190.801†	-21.9	1.3	2.1695 µg/L	2.1695 ppb	09:19:45
2	U 409.014†	-275.2	-40.5	-3.8642 µg/L	-3.8642 ppb	09:19:24
2	V 292.402†	-133.1	-10.2	-0.1310 µg/L	-0.1310 ppb	09:19:24
2	Zn 213.857†	691.7	16.1	0.4606 µg/L	0.4606 ppb	09:19:45
3	Sc RADIAL	76051.4	76051.4	99.0 %		09:18:16
3	Al 396.153Radial†	-10.7	17.2	11.931 µg/L	11.931 ppb	09:18:16
3	Ca 317.933Radial†	270.8	21.9	17.250 µg/L	17.250 ppb	09:18:37
3	Fe 238.204 Radial†	18.2	2.5	35.805 µg/L	35.805 ppb	09:18:37
3	K 766.490 Radial†	471.6	64.3	42.703 µg/L	42.703 ppb	09:18:16

3	Mg 279.077 IEC†	16.9	8.8	95.401 µg/L	95.401 ppb		09:18:37
3	Na 589.592 Radial†	521.6	-18.1	-5.1859 µg/L	-5.1859 ppb		09:18:16
3	Sr 421.552†	578.4	26.6	0.1688 µg/L	0.1688 ppb		09:18:16
3	Sc 361.383	1943892.0	1943892.0	100.03 %			09:19:51
3	Y 371.029	1228013.4	1228013.4	99.936 %			09:19:51
3	Ag 328.068†	25.2	80.3	0.7491 µg/L	0.7491 ppb		09:19:56
3	As 188.979†	-1.7	-2.3	-5.2873 µg/L	-5.2873 ppb		09:20:17
3	B 249.677†	158.6	43.4	2.0908 µg/L	2.0908 ppb		09:20:17
3	Ba 233.527†	-8.9	5.6	0.1616 µg/L	0.1616 ppb		09:20:17
3	Be 313.107†	3859.2	18.8	0.0130 µg/L	0.0130 ppb		09:19:56
3	Cd 226.502†	-120.1	15.4	0.4490 µg/L	0.4490 ppb		09:20:17
3	Co 228.616†	-38.9	6.2	0.3402 µg/L	0.3402 ppb		09:20:17
3	Cr 267.716†	-75.6	7.2	0.1662 µg/L	0.1662 ppb		09:19:56
3	Cu 324.752†	4163.5	494.2	3.7209 µg/L	3.7209 ppb		09:19:56
3	Mn 257.610†	-206.5	-17.0	-0.0618 µg/L	-0.0618 ppb		09:20:17
3	Mo 202.031†	23.4	6.2	0.7812 µg/L	0.7812 ppb		09:20:17
3	Ni 231.604†	339.1	3.6	0.2245 µg/L	0.2245 ppb		09:20:17
3	P 214.914†	170.4	-32.1	1.5362 µg/L	1.5362 ppb		09:20:17
3	Pb 220.353†	60.5	4.6	1.3164 µg/L	1.3164 ppb		09:20:17
3	S 181.975 Axial†	20.9	-4.6	-26.602 µg/L	-26.602 ppb		09:20:17
3	Sb 206.836†	8.0	-14.4	-15.885 µg/L	-15.885 ppb		09:20:17
3	Se 196.026†	-1.7	-14.1	-22.154 µg/L	-22.154 ppb		09:20:17
3	SiO2†	2435.7	156.3	32.991 µg/L	32.991 ppb		09:19:56
3	Si 251.611†	529.8	225.2	18.889 µg/L	18.889 ppb		09:20:17
3	Sn 189.927†	9144.0	9118.2	5322.2 µg/L	5322.2 ppb		09:19:56
3	Ti 334.940†	899.3	125.4	0.3055 µg/L	0.3055 ppb		09:19:56
3	Tl 190.801†	-21.5	1.5	2.6501 µg/L	2.6501 ppb		09:20:17
3	U 409.014†	-134.9	98.1	9.3544 µg/L	9.3544 ppb		09:19:56
3	V 292.402†	-139.5	-17.3	-0.1977 µg/L	-0.1977 ppb		09:19:56
3	Zn 213.857†	685.3	13.8	0.3878 µg/L	0.3878 ppb		09:20:17

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1950959.9	100.39	%	0.320				0.32%
Sc RADIAL	76040.0	99.0	%	0.11				0.11%
Y 371.029	1233132.2	100.35	%	0.363				0.36%
Ag 328.068†	47.4	0.4418	µg/L	0.29938	0.4418	ppb	0.29938	67.76%
Al 396.153Radial†	22.3	15.493	µg/L	13.6141	15.493	ppb	13.6141	87.87%
As 188.979†	-2.7	-6.2759	µg/L	1.56290	-6.2759	ppb	1.56290	24.90%
B 249.677†	35.8	1.7302	µg/L	0.31758	1.7302	ppb	0.31758	18.36%
Ba 233.527†	0.5	0.0128	µg/L	0.17606	0.0128	ppb	0.17606	>999.9%
Be 313.107†	34.9	0.0242	µg/L	0.02264	0.0242	ppb	0.02264	93.67%
Ca 317.933Radial†	24.8	19.536	µg/L	3.3261	19.536	ppb	3.3261	17.03%
Cd 226.502†	11.1	0.3237	µg/L	0.12915	0.3237	ppb	0.12915	39.89%
Co 228.616†	-0.3	-0.0162	µg/L	0.30931	-0.0162	ppb	0.30931	>999.9%
Cr 267.716†	10.1	0.2332	µg/L	0.09089	0.2332	ppb	0.09089	38.98%
Cu 324.752†	533.6	4.0155	µg/L	0.27009	4.0155	ppb	0.27009	6.73%
Fe 238.204 Radial†	1.6	22.574	µg/L	12.7603	22.574	ppb	12.7603	56.53%
K 766.490 Radial†	59.5	39.513	µg/L	8.7484	39.513	ppb	8.7484	22.14%
Mg 279.077 IEC†	6.4	69.294	µg/L	27.1715	69.294	ppb	27.1715	39.21%
Mn 257.610†	-15.1	-0.0556	µg/L	0.00703	-0.0556	ppb	0.00703	12.64%
Mo 202.031†	0.8	0.0962	µg/L	0.59368	0.0962	ppb	0.59368	617.40%
Na 589.592 Radial†	-19.7	-5.6649	µg/L	0.42895	-5.6649	ppb	0.42895	7.57%
Ni 231.604†	2.0	0.1294	µg/L	0.10453	0.1294	ppb	0.10453	80.81%
P 214.914†	-35.8	-5.4565	µg/L	16.96507	-5.4565	ppb	16.96507	310.92%
Pb 220.353†	5.8	1.6967	µg/L	0.41453	1.6967	ppb	0.41453	24.43%
S 181.975 Axial†	-3.0	-17.472	µg/L	7.9639	-17.472	ppb	7.9639	45.58%
Sb 206.836†	-14.4	-15.898	µg/L	0.1945	-15.898	ppb	0.1945	1.22%
Se 196.026†	-6.0	-9.4519	µg/L	14.65104	-9.4519	ppb	14.65104	155.01%
SiO2†	157.9	33.321	µg/L	1.8819	33.321	ppb	1.8819	5.65%
Si 251.611†	215.5	18.073	µg/L	1.0479	18.073	ppb	1.0479	5.80%
Sn 189.927†	9340.4	5451.9	µg/L	122.68	5451.9	ppb	122.68	2.25%
Sr 421.552†	14.5	0.0922	µg/L	0.06636	0.0922	ppb	0.06636	71.97%
Ti 334.940†	131.2	0.3221	µg/L	0.09295	0.3221	ppb	0.09295	28.85%
Tl 190.801†	0.8	1.4318	µg/L	1.71085	1.4318	ppb	1.71085	119.49%
U 409.014†	-5.5	-0.5324	µg/L	8.71258	-0.5324	ppb	8.71258	>999.9%
V 292.402†	-12.6	-0.1550	µg/L	0.03710	-0.1550	ppb	0.03710	23.94%
Zn 213.857†	14.9	0.4217	µg/L	0.03665	0.4217	ppb	0.03665	8.69%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 09:20:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77658.0	77658.0	101	%			09:21:02
1	Al 396.153Radial†	7654.3	7599.6	5269.5	µg/L	5269.5	ppb	09:21:02
1	Ca 317.933Radial†	7074.2	6746.2	5312.1	µg/L	5312.1	ppb	09:21:02
1	Fe 238.204 Radial†	389.4	369.3	5313.0	µg/L	5313.0	ppb	09:21:22
1	K 766.490 Radial†	8401.4	7898.7	5243.5	µg/L	5243.5	ppb	09:21:02
1	Mg 279.077 IEC†	499.2	485.5	5295.0	µg/L	5295.0	ppb	09:21:22
1	Na 589.592 Radial†	37261.3	36314.1	10428	µg/L	10428	ppb	09:21:02
1	Sr 421.552†	83392.8	81934.9	520.61	µg/L	520.61	ppb	09:21:02
1	Sc 361.383	1928098.4	1928098.4	99.213	%			09:22:26
1	Y 371.029	1215523.9	1215523.9	98.920	%			09:22:26
1	Ag 328.068†	56397.2	56899.7	534.26	µg/L	534.26	ppb	09:22:31
1	As 188.979†	238.2	239.6	551.83	µg/L	551.83	ppb	09:22:52
1	B 249.677†	10844.3	10815.2	524.25	µg/L	524.25	ppb	09:22:31
1	Ba 233.527†	18196.6	18355.5	534.25	µg/L	534.25	ppb	09:22:31
1	Be 313.107†	763452.8	765669.8	533.25	µg/L	533.25	ppb	09:22:26
1	Cd 226.502†	17886.6	18164.0	534.63	µg/L	534.63	ppb	09:22:31
1	Co 228.616†	9622.5	9743.8	537.17	µg/L	537.17	ppb	09:22:31
1	Cr 267.716†	22981.7	23246.8	539.53	µg/L	539.53	ppb	09:22:31
1	Cu 324.752†	74406.5	71328.6	537.05	µg/L	537.05	ppb	09:22:31
1	Mn 257.610†	141029.1	142337.3	526.32	µg/L	526.32	ppb	09:22:31
1	Mo 202.031†	4297.3	4314.2	542.07	µg/L	542.07	ppb	09:22:52
1	Ni 231.604†	8805.9	8540.4	537.52	µg/L	537.52	ppb	09:22:31
1	P 214.914†	1340.7	1148.9	2699.4	µg/L	2699.4	ppb	09:22:52
1	Pb 220.353†	1938.8	1898.3	553.78	µg/L	553.78	ppb	09:22:52
1	S 181.975 Axial†	212.8	188.9	1083.0	µg/L	1083.0	ppb	09:22:52
1	Sb 206.836†	520.5	502.2	558.27	µg/L	558.27	ppb	09:22:52
1	Se 196.026†	348.9	339.2	555.42	µg/L	555.42	ppb	09:22:52
1	SiO2†	29320.2	27274.0	5756.8	µg/L	5756.8	ppb	09:22:31
1	Si 251.611†	32082.3	32032.3	2686.8	µg/L	2686.8	ppb	09:22:31
1	Sn 189.927†	976.1	960.5	563.28	µg/L	563.28	ppb	09:22:52
1	Ti 334.940†	212701.2	213614.9	532.42	µg/L	532.42	ppb	09:22:26
1	Tl 190.801†	295.3	320.7	556.98	µg/L	556.98	ppb	09:22:52
1	U 409.014†	5272.7	5547.5	528.33	µg/L	528.33	ppb	09:22:31
1	V 292.402†	42624.5	43084.7	542.00	µg/L	542.00	ppb	09:22:31
1	Zn 213.857†	18948.8	18427.8	533.44	µg/L	533.44	ppb	09:22:31
2	Sc RADIAL	77663.2	77663.2	101	%			09:21:28
2	Al 396.153Radial†	7642.5	7587.4	5261.1	µg/L	5261.1	ppb	09:21:28
2	Ca 317.933Radial†	7070.7	6742.3	5309.0	µg/L	5309.0	ppb	09:21:28
2	Fe 238.204 Radial†	388.3	368.2	5297.9	µg/L	5297.9	ppb	09:21:48
2	K 766.490 Radial†	8336.8	7834.3	5200.7	µg/L	5200.7	ppb	09:21:28
2	Mg 279.077 IEC†	504.1	490.3	5346.6	µg/L	5346.6	ppb	09:21:48
2	Na 589.592 Radial†	37269.4	36319.7	10430	µg/L	10430	ppb	09:21:28
2	Sr 421.552†	83523.3	82058.5	521.39	µg/L	521.39	ppb	09:21:28
2	Sc 361.383	1937804.8	1937804.8	99.712	%			09:22:58
2	Y 371.029	1221278.1	1221278.1	99.388	%			09:22:58
2	Ag 328.068†	56570.0	56788.3	533.22	µg/L	533.22	ppb	09:23:04
2	As 188.979†	235.9	236.0	543.56	µg/L	543.56	ppb	09:23:24
2	B 249.677†	10937.4	10853.7	526.13	µg/L	526.13	ppb	09:23:04
2	Ba 233.527†	18319.6	18386.9	535.17	µg/L	535.17	ppb	09:23:04
2	Be 313.107†	761338.1	759694.5	529.09	µg/L	529.09	ppb	09:22:58
2	Cd 226.502†	18007.6	18195.0	535.55	µg/L	535.55	ppb	09:23:04
2	Co 228.616†	9671.6	9744.6	537.21	µg/L	537.21	ppb	09:23:04
2	Cr 267.716†	23027.9	23177.2	537.92	µg/L	537.92	ppb	09:23:04
2	Cu 324.752†	74686.8	71234.0	536.33	µg/L	536.33	ppb	09:23:04
2	Mn 257.610†	141618.7	142216.7	525.87	µg/L	525.87	ppb	09:23:04
2	Mo 202.031†	4272.1	4267.2	536.17	µg/L	536.17	ppb	09:23:24
2	Ni 231.604†	8860.5	8550.6	538.17	µg/L	538.17	ppb	09:23:04
2	P 214.914†	1343.1	1144.5	2689.0	µg/L	2689.0	ppb	09:23:24
2	Pb 220.353†	1936.2	1885.8	550.13	µg/L	550.13	ppb	09:23:24

2	S 181.975 Axial†	207.2	182.2	1044.7 µg/L	1044.7 ppb	09:23:24
2	Sb 206.836†	521.2	500.3	556.07 µg/L	556.07 ppb	09:23:24
2	Se 196.026†	353.6	342.2	560.01 µg/L	560.01 ppb	09:23:24
2	SiO2†	29370.4	27176.3	5736.2 µg/L	5736.2 ppb	09:23:04
2	Si 251.611†	32241.0	32029.5	2686.5 µg/L	2686.5 ppb	09:23:04
2	Sn 189.927†	977.1	956.5	560.96 µg/L	560.96 ppb	09:23:24
2	Ti 334.940†	212129.6	211967.7	528.31 µg/L	528.31 ppb	09:22:58
2	Tl 190.801†	286.3	310.2	538.92 µg/L	538.92 ppb	09:23:24
2	U 409.014†	5267.9	5516.1	525.33 µg/L	525.33 ppb	09:23:04
2	V 292.402†	42878.9	43124.7	542.45 µg/L	542.45 ppb	09:23:04
2	Zn 213.857†	19038.6	18422.2	533.27 µg/L	533.27 ppb	09:23:04
3	Sc RADIAL	77480.4	77480.4	101 %		09:21:54
3	Al 396.153Radial†	7634.3	7597.1	5269.1 µg/L	5269.1 ppb	09:21:54
3	Ca 317.933Radial†	7049.3	6737.5	5305.3 µg/L	5305.3 ppb	09:21:54
3	Fe 238.204 Radial†	385.3	366.2	5268.0 µg/L	5268.0 ppb	09:22:14
3	K 766.490 Radial†	8316.2	7833.3	5200.0 µg/L	5200.0 ppb	09:21:54
3	Mg 279.077 IEC†	505.9	493.3	5378.2 µg/L	5378.2 ppb	09:22:14
3	Na 589.592 Radial†	37205.3	36343.1	10436 µg/L	10436 ppb	09:21:54
3	Sr 421.552†	83333.4	82065.1	521.43 µg/L	521.43 ppb	09:21:54
3	Sc 361.383	1926729.9	1926729.9	99.143 %		09:23:31
3	Y 371.029	1212565.3	1212565.3	98.679 %		09:23:31
3	Ag 328.068†	55069.2	55600.6	521.97 µg/L	521.97 ppb	09:23:37
3	As 188.979†	216.0	217.3	500.57 µg/L	500.57 ppb	09:23:57
3	B 249.677†	10564.3	10540.5	510.86 µg/L	510.86 ppb	09:23:37
3	Ba 233.527†	17467.5	17633.1	513.22 µg/L	513.22 ppb	09:23:37
3	Be 313.107†	746564.4	749181.9	521.77 µg/L	521.77 ppb	09:23:31
3	Cd 226.502†	17128.7	17412.3	512.49 µg/L	512.49 ppb	09:23:37
3	Co 228.616†	9167.6	9291.9	512.19 µg/L	512.19 ppb	09:23:37
3	Cr 267.716†	21487.9	21756.5	504.95 µg/L	504.95 ppb	09:23:37
3	Cu 324.752†	71144.3	68091.4	512.70 µg/L	512.70 ppb	09:23:37
3	Mn 257.610†	134069.3	135418.4	500.75 µg/L	500.75 ppb	09:23:37
3	Mo 202.031†	3775.5	3790.9	476.35 µg/L	476.35 ppb	09:23:57
3	Ni 231.604†	8430.5	8168.0	514.09 µg/L	514.09 ppb	09:23:37
3	P 214.914†	1217.2	1025.2	2405.0 µg/L	2405.0 ppb	09:23:57
3	Pb 220.353†	1755.2	1714.4	500.04 µg/L	500.04 ppb	09:23:57
3	S 181.975 Axial†	195.6	171.8	984.78 µg/L	984.78 ppb	09:23:57
3	Sb 206.836†	476.4	458.1	508.78 µg/L	508.78 ppb	09:23:57
3	Se 196.026†	325.9	316.3	518.99 µg/L	518.99 ppb	09:23:57
3	SiO2†	28347.8	26314.2	5554.2 µg/L	5554.2 ppb	09:23:37
3	Si 251.611†	30961.1	30924.4	2593.8 µg/L	2593.8 ppb	09:23:37
3	Sn 189.927†	852.9	836.9	491.17 µg/L	491.17 ppb	09:23:57
3	Ti 334.940†	207646.6	208668.9	520.08 µg/L	520.08 ppb	09:23:31
3	Tl 190.801†	268.9	294.3	511.45 µg/L	511.45 ppb	09:23:57
3	U 409.014†	5062.2	5339.0	508.44 µg/L	508.44 ppb	09:23:37
3	V 292.402†	40463.4	40935.5	514.67 µg/L	514.67 ppb	09:23:37
3	Zn 213.857†	18060.9	17545.8	507.87 µg/L	507.87 ppb	09:23:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1930877.7	99.356	%	0.3107				0.31%
Sc RADIAL	77600.5	101	%	0.1				0.13%
Y 371.029	1216455.8	98.996	%	0.3606				0.36%
Ag 328.068†	56429.5	529.82	µg/L	6.816	529.82	ppb	6.816	1.29%
QC value within limits for Ag 328.068 Recovery = 105.96%								
Al 396.153Radial†	7594.7	5266.6	µg/L	4.71	5266.6	ppb	4.71	0.09%
QC value within limits for Al 396.153Radial Recovery = 105.33%								
As 188.979†	231.0	531.98	µg/L	27.521	531.98	ppb	27.521	5.17%
QC value within limits for As 188.979 Recovery = 106.40%								
B 249.677†	10736.5	520.41	µg/L	8.329	520.41	ppb	8.329	1.60%
QC value within limits for B 249.677 Recovery = 104.08%								
Ba 233.527†	18125.2	527.54	µg/L	12.417	527.54	ppb	12.417	2.35%
QC value within limits for Ba 233.527 Recovery = 105.51%								
Be 313.107†	758182.1	528.03	µg/L	5.813	528.03	ppb	5.813	1.10%
QC value within limits for Be 313.107 Recovery = 105.61%								
Ca 317.933Radial†	6742.0	5308.8	µg/L	3.41	5308.8	ppb	3.41	0.06%
QC value within limits for Ca 317.933Radial Recovery = 106.18%								
Cd 226.502†	17923.8	527.55	µg/L	13.058	527.55	ppb	13.058	2.48%
QC value within limits for Cd 226.502 Recovery = 105.51%								
Co 228.616†	9593.4	528.86	µg/L	14.432	528.86	ppb	14.432	2.73%

QC value within limits for Co 228.616 Recovery = 105.77%

Cr 267.716†	22726.8	527.47 µg/L	19.517	527.47 ppb	19.517	3.70%

QC value within limits for Cr 267.716 Recovery = 105.49%

Cu 324.752†	70218.0	528.69 µg/L	13.855	528.69 ppb	13.855	2.62%

QC value within limits for Cu 324.752 Recovery = 105.74%

Fe 238.204 Radial†	367.9	5292.9 µg/L	22.89	5292.9 ppb	22.89	0.43%

QC value within limits for Fe 238.204 Radial Recovery = 105.86%

K 766.490 Radial†	7855.4	5214.7 µg/L	24.90	5214.7 ppb	24.90	0.48%

QC value within limits for K 766.490 Radial Recovery = 104.29%

Mg 279.077 IEC†	489.7	5339.9 µg/L	41.97	5339.9 ppb	41.97	0.79%

QC value within limits for Mg 279.077 IEC Recovery = 106.80%

Mn 257.610†	139990.8	517.65 µg/L	14.635	517.65 ppb	14.635	2.83%

QC value within limits for Mn 257.610 Recovery = 103.53%

Mo 202.031†	4124.1	518.20 µg/L	36.361	518.20 ppb	36.361	7.02%

QC value within limits for Mo 202.031 Recovery = 103.64%

Na 589.592 Radial†	36325.7	10431 µg/L	4.4	10431 ppb	4.4	0.04%

QC value within limits for Na 589.592 Radial Recovery = 104.31%

Ni 231.604†	8419.7	529.93 µg/L	13.718	529.93 ppb	13.718	2.59%

QC value within limits for Ni 231.604 Recovery = 105.99%

P 214.914†	1106.2	2597.8 µg/L	167.07	2597.8 ppb	167.07	6.43%

QC value within limits for P 214.914 Recovery = 103.91%

Pb 220.353†	1832.8	534.65 µg/L	30.029	534.65 ppb	30.029	5.62%

QC value within limits for Pb 220.353 Recovery = 106.93%

S 181.975 Axial†	181.0	1037.5 µg/L	49.51	1037.5 ppb	49.51	4.77%

QC value within limits for S 181.975 Axial Recovery = 103.75%

Sb 206.836†	486.9	541.04 µg/L	27.961	541.04 ppb	27.961	5.17%

QC value within limits for Sb 206.836 Recovery = 108.21%

Se 196.026†	332.6	544.81 µg/L	22.478	544.81 ppb	22.478	4.13%

QC value within limits for Se 196.026 Recovery = 108.96%

SiO2†	26921.5	5682.4 µg/L	111.50	5682.4 ppb	111.50	1.96%

QC value within limits for SiO2 Recovery = 106.26%

Si 251.611†	31662.0	2655.7 µg/L	53.59	2655.7 ppb	53.59	2.02%

QC value within limits for Si 251.611 Recovery = 106.23%

Sn 189.927†	917.9	538.47 µg/L	40.983	538.47 ppb	40.983	7.61%

QC value within limits for Sn 189.927 Recovery = 107.69%

Sr 421.552†	82019.5	521.14 µg/L	0.466	521.14 ppb	0.466	0.09%

QC value within limits for Sr 421.552 Recovery = 104.23%

Ti 334.940†	211417.2	526.93 µg/L	6.284	526.93 ppb	6.284	1.19%

QC value within limits for Ti 334.940 Recovery = 105.39%

Tl 190.801†	308.4	535.78 µg/L	22.931	535.78 ppb	22.931	4.28%

QC value within limits for Tl 190.801 Recovery = 107.16%

U 409.014†	5467.5	520.70 µg/L	10.726	520.70 ppb	10.726	2.06%

QC value within limits for U 409.014 Recovery = 104.14%

V 292.402†	42381.6	533.04 µg/L	15.911	533.04 ppb	15.911	2.99%

QC value within limits for V 292.402 Recovery = 106.61%

Zn 213.857†	18131.9	524.86 µg/L	14.716	524.86 ppb	14.716	2.80%

QC value within limits for Zn 213.857 Recovery = 104.97%

All analyte(s) passed QC.

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 09:24:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75637.8	75637.8	98.5	%			09:24:40
1	Al 396.153Radial†	7.5	35.5	24.723	µg/L	24.723	ppb	09:24:40
1	Ca 317.933Radial†	253.4	5.7	4.5028	µg/L	4.5028	ppb	09:25:00
1	Fe 238.204 Radial†	17.4	1.8	25.316	µg/L	25.316	ppb	09:25:00
1	K 766.490 Radial†	447.3	42.3	28.090	µg/L	28.090	ppb	09:24:40
1	Mg 279.077 IEC†	13.2	5.1	55.287	µg/L	55.287	ppb	09:25:00
1	Na 589.592 Radial†	598.9	63.3	18.182	µg/L	18.182	ppb	09:24:40
1	Sr 421.552†	598.6	50.2	0.3191	µg/L	0.3191	ppb	09:24:40
1	Sc 361.383	1940481.8	1940481.8	99.850	%			09:26:02
1	Y 371.029	1228957.2	1228957.2	100.01	%			09:26:02
1	Ag 328.068†	-39.6	15.4	0.1472	µg/L	0.1472	ppb	09:26:08
1	As 188.979†	0.3	-0.2	-0.5715	µg/L	-0.5715	ppb	09:26:28
1	B 249.677†	139.3	24.3	1.1694	µg/L	1.1694	ppb	09:26:08
1	Ba 233.527†	-9.7	4.8	0.1397	µg/L	0.1397	ppb	09:26:28
1	Be 313.107†	3905.4	71.9	0.0499	µg/L	0.0499	ppb	09:26:08
1	Cd 226.502†	-130.3	5.0	0.1447	µg/L	0.1447	ppb	09:26:28
1	Co 228.616†	-39.3	5.6	0.3092	µg/L	0.3092	ppb	09:26:28
1	Cr 267.716†	-76.9	5.8	0.1337	µg/L	0.1337	ppb	09:26:08
1	Cu 324.752†	4078.0	415.9	3.1304	µg/L	3.1304	ppb	09:26:08
1	Mn 257.610†	-194.3	-5.1	-0.0178	µg/L	-0.0178	ppb	09:26:28
1	Mo 202.031†	3.1	-14.1	-1.7652	µg/L	-1.7652	ppb	09:26:28
1	Ni 231.604†	343.3	8.4	0.5283	µg/L	0.5283	ppb	09:26:28
1	P 214.914†	209.0	6.8	16.022	µg/L	16.022	ppb	09:26:28
1	Pb 220.353†	59.7	3.8	1.1053	µg/L	1.1053	ppb	09:26:28
1	S 181.975 Axial†	20.6	-4.9	-28.219	µg/L	-28.219	ppb	09:26:28
1	Sb 206.836†	27.8	5.4	5.9530	µg/L	5.9530	ppb	09:26:28
1	Se 196.026†	8.0	-4.4	-6.8545	µg/L	-6.8545	ppb	09:26:28
1	SiO2†	2273.7	-1.7	-0.3611	µg/L	-0.3611	ppb	09:26:08
1	Si 251.611†	332.5	28.5	2.3879	µg/L	2.3879	ppb	09:26:28
1	Sn 189.927†	23.4	0.0	0.0352	µg/L	0.0352	ppb	09:26:28
1	Ti 334.940†	930.9	158.6	0.3912	µg/L	0.3912	ppb	09:26:08
1	Tl 190.801†	-22.4	0.7	1.1502	µg/L	1.1502	ppb	09:26:28
1	U 409.014†	-220.3	12.3	1.1736	µg/L	1.1736	ppb	09:26:08
1	V 292.402†	-98.1	23.9	0.2868	µg/L	0.2868	ppb	09:26:08
1	Zn 213.857†	691.4	21.2	0.6051	µg/L	0.6051	ppb	09:26:28
2	Sc RADIAL	75398.5	75398.5	98.2	%			09:25:06
2	Al 396.153Radial†	-2.5	25.4	17.670	µg/L	17.670	ppb	09:25:06
2	Ca 317.933Radial†	263.2	16.5	13.019	µg/L	13.019	ppb	09:25:26
2	Fe 238.204 Radial†	17.1	1.5	21.901	µg/L	21.901	ppb	09:25:26
2	K 766.490 Radial†	432.2	28.4	18.831	µg/L	18.831	ppb	09:25:06
2	Mg 279.077 IEC†	11.0	2.9	31.752	µg/L	31.752	ppb	09:25:26
2	Na 589.592 Radial†	542.7	8.0	2.2848	µg/L	2.2848	ppb	09:25:06
2	Sr 421.552†	543.1	-4.4	-0.0278	µg/L	-0.0278	ppb	09:25:06
2	Sc 361.383	1951012.5	1951012.5	100.39	%			09:26:35
2	Y 371.029	1235099.7	1235099.7	100.51	%			09:26:35
2	Ag 328.068†	-2.8	52.3	0.4879	µg/L	0.4879	ppb	09:26:40
2	As 188.979†	-2.6	-3.2	-7.2830	µg/L	-7.2830	ppb	09:27:01
2	B 249.677†	173.9	58.0	2.8094	µg/L	2.8094	ppb	09:26:40
2	Ba 233.527†	-5.9	8.7	0.2520	µg/L	0.2520	ppb	09:27:01
2	Be 313.107†	3970.8	115.8	0.0807	µg/L	0.0807	ppb	09:26:40
2	Cd 226.502†	-129.2	6.7	0.1962	µg/L	0.1962	ppb	09:27:01
2	Co 228.616†	-40.3	4.8	0.2665	µg/L	0.2665	ppb	09:27:01
2	Cr 267.716†	-69.5	13.5	0.3135	µg/L	0.3135	ppb	09:26:40
2	Cu 324.752†	4071.7	387.6	2.9172	µg/L	2.9172	ppb	09:26:40
2	Mn 257.610†	-178.8	11.4	0.0437	µg/L	0.0437	ppb	09:27:01
2	Mo 202.031†	19.3	2.0	0.2532	µg/L	0.2532	ppb	09:27:01
2	Ni 231.604†	346.6	9.8	0.6182	µg/L	0.6182	ppb	09:27:01
2	P 214.914†	209.2	5.9	13.785	µg/L	13.785	ppb	09:27:01
2	Pb 220.353†	45.0	-11.1	-3.2524	µg/L	-3.2524	ppb	09:27:01

2	S 181.975 Axial†	22.4	-3.2	-18.564 µg/L	-18.564 ppb	09:27:01
2	Sb 206.836†	25.9	3.4	3.7089 µg/L	3.7089 ppb	09:27:01
2	Se 196.026†	14.4	1.9	3.0609 µg/L	3.0609 ppb	09:27:01
2	SiO2†	2263.2	-24.4	-5.1500 µg/L	-5.1500 ppb	09:26:40
2	Si 251.611†	335.3	29.5	2.4734 µg/L	2.4734 ppb	09:27:01
2	Sn 189.927†	25.2	1.7	0.9914 µg/L	0.9914 ppb	09:27:01
2	Ti 334.940†	787.9	11.2	0.0257 µg/L	0.0257 ppb	09:26:40
2	Tl 190.801†	-20.4	2.8	4.8252 µg/L	4.8252 ppb	09:27:01
2	U 409.014†	-187.1	46.6	4.4407 µg/L	4.4407 ppb	09:26:40
2	V 292.402†	-131.0	-8.4	-0.0960 µg/L	-0.0960 ppb	09:26:40
2	Zn 213.857†	702.4	28.4	0.8167 µg/L	0.8167 ppb	09:27:01
3	Sc RADIAL	75525.1	75525.1	98.3 %		09:25:32
3	Al 396.153Radial†	-19.4	8.3	5.7463 µg/L	5.7463 ppb	09:25:32
3	Ca 317.933Radial†	255.6	8.3	6.5139 µg/L	6.5139 ppb	09:25:52
3	Fe 238.204 Radial†	15.8	0.1	2.1414 µg/L	2.1414 ppb	09:25:52
3	K 766.490 Radial†	493.8	90.2	59.904 µg/L	59.904 ppb	09:25:32
3	Mg 279.077 IEC†	11.4	3.3	35.792 µg/L	35.792 ppb	09:25:52
3	Na 589.592 Radial†	566.1	30.8	8.8572 µg/L	8.8572 ppb	09:25:32
3	Sr 421.552†	535.2	-13.3	-0.0844 µg/L	-0.0844 ppb	09:25:32
3	Sc 361.383	1946266.4	1946266.4	100.15 %		09:27:07
3	Y 371.029	1231901.9	1231901.9	100.25 %		09:27:07
3	Ag 328.068†	-15.5	39.7	0.3704 µg/L	0.3704 ppb	09:27:12
3	As 188.979†	1.9	1.3	3.0197 µg/L	3.0197 ppb	09:27:33
3	B 249.677†	167.5	52.0	2.5289 µg/L	2.5289 ppb	09:27:12
3	Ba 233.527†	-4.5	10.0	0.2914 µg/L	0.2914 ppb	09:27:33
3	Be 313.107†	4039.3	193.9	0.1350 µg/L	0.1350 ppb	09:27:12
3	Cd 226.502†	-125.7	10.0	0.2935 µg/L	0.2935 ppb	09:27:33
3	Co 228.616†	-44.3	0.7	0.0406 µg/L	0.0406 ppb	09:27:33
3	Cr 267.716†	-92.6	-9.7	-0.2248 µg/L	-0.2248 ppb	09:27:12
3	Cu 324.752†	4080.9	406.7	3.0580 µg/L	3.0580 ppb	09:27:12
3	Mn 257.610†	-196.0	-6.2	-0.0240 µg/L	-0.0240 ppb	09:27:33
3	Mo 202.031†	17.0	-0.2	-0.0311 µg/L	-0.0311 ppb	09:27:33
3	Ni 231.604†	346.6	10.7	0.6731 µg/L	0.6731 ppb	09:27:33
3	P 214.914†	204.6	1.8	4.0688 µg/L	4.0688 ppb	09:27:33
3	Pb 220.353†	74.3	18.2	5.3233 µg/L	5.3233 ppb	09:27:33
3	S 181.975 Axial†	23.6	-1.9	-11.103 µg/L	-11.103 ppb	09:27:33
3	Sb 206.836†	26.6	4.2	4.6242 µg/L	4.6242 ppb	09:27:33
3	Se 196.026†	3.8	-8.7	-13.694 µg/L	-13.694 ppb	09:27:33
3	SiO2†	2249.1	-32.9	-6.9535 µg/L	-6.9535 ppb	09:27:12
3	Si 251.611†	320.7	15.8	1.3216 µg/L	1.3216 ppb	09:27:33
3	Sn 189.927†	23.8	0.3	0.1958 µg/L	0.1958 ppb	09:27:33
3	Ti 334.940†	837.0	62.1	0.1522 µg/L	0.1522 ppb	09:27:12
3	Tl 190.801†	-21.0	2.1	3.5596 µg/L	3.5596 ppb	09:27:33
3	U 409.014†	-360.3	-126.8	-12.103 µg/L	-12.103 ppb	09:27:12
3	V 292.402†	-115.8	6.5	0.0680 µg/L	0.0680 ppb	09:27:12
3	Zn 213.857†	692.1	19.8	0.5667 µg/L	0.5667 ppb	09:27:33

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945920.2	100.13	%	0.271				0.27%
Sc RADIAL	75520.5	98.3	%	0.16				0.16%
Y 371.029	1231986.3	100.26	%	0.250				0.25%
Ag 328.068†	35.8	0.3351	µg/L	0.17304	0.3351	ppb	0.17304	51.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	23.1	16.046	µg/L	9.5920	16.046	ppb	9.5920	59.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.7	-1.6116	µg/L	5.22951	-1.6116	ppb	5.22951	324.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	44.8	2.1693	µg/L	0.87715	2.1693	ppb	0.87715	40.44%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.8	0.2277	µg/L	0.07871	0.2277	ppb	0.07871	34.57%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.2	0.0886	µg/L	0.04310	0.0886	ppb	0.04310	48.67%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.2	8.0118	µg/L	4.45118	8.0118	ppb	4.45118	55.56%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.2	0.2115	µg/L	0.07556	0.2115	ppb	0.07556	35.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.7	0.2055	µg/L	0.14432	0.2055	ppb	0.14432	70.24%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                3.2      0.0742 µg/L       0.27403      0.0742 ppb        0.27403 369.56%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              403.4      3.0352 µg/L       0.10842      3.0352 ppb        0.10842   3.57%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.1      16.453 µg/L       12.5113      16.453 ppb        12.5113  76.04%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         53.6      35.608 µg/L       21.5442      35.608 ppb        21.5442  60.50%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            3.8      40.944 µg/L       12.5847      40.944 ppb        12.5847  30.74%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                0.0      0.0006 µg/L       0.03742      0.0006 ppb        0.03742 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -4.1     -0.5143 µg/L       1.09253     -0.5143 ppb        1.09253 212.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        34.0      9.7747 µg/L       7.98833      9.7747 ppb        7.98833  81.72%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.6      0.6065 µg/L       0.07311      0.6065 ppb        0.07311  12.05%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 4.9      11.292 µg/L        6.3546      11.292 ppb         6.3546  56.28%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                3.6      1.0587 µg/L       4.28806      1.0587 ppb        4.28806 405.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.4     -19.295 µg/L        8.5811     -19.295 ppb         8.5811  44.47%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                4.3      4.7621 µg/L       1.12836      4.7621 ppb        1.12836  23.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.7     -5.8292 µg/L       8.42448     -5.8292 ppb        8.42448 144.52%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -19.7     -4.1549 µg/L       3.40702     -4.1549 ppb        3.40702  82.00%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               24.6      2.0610 µg/L       0.64175      2.0610 ppb        0.64175  31.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.7      0.4075 µg/L       0.51203      0.4075 ppb        0.51203 125.66%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               10.9      0.0689 µg/L       0.21844      0.0689 ppb        0.21844 316.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               77.3      0.1897 µg/L       0.18564      0.1897 ppb        0.18564  97.86%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.8      3.1783 µg/L       1.86690      3.1783 ppb        1.86690  58.74%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -22.6     -2.1629 µg/L       8.76206     -2.1629 ppb        8.76206 405.10%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 7.4      0.0863 µg/L       0.19206      0.0863 ppb        0.19206 222.59%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               23.1      0.6628 µg/L       0.13460      0.6628 ppb        0.13460  20.31%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 10:02:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78930.7	78930.7	103	%			10:03:30
1	Al 396.153Radial†	7594.5	7419.3	5144.7	µg/L	5144.7	ppb	10:03:30
1	Ca 317.933Radial†	6809.4	6375.6	5020.3	µg/L	5020.3	ppb	10:03:51
1	Fe 238.204 Radial†	385.8	359.6	5173.3	µg/L	5173.3	ppb	10:03:51
1	K 766.490 Radial†	8224.2	7592.3	5040.0	µg/L	5040.0	ppb	10:03:30
1	Mg 279.077 IEC†	495.6	474.0	5169.3	µg/L	5169.3	ppb	10:03:51
1	Na 589.592 Radial†	36830.9	35300.9	10137	µg/L	10137	ppb	10:03:30
1	Sr 421.552†	82551.3	79785.8	506.95	µg/L	506.95	ppb	10:03:30
1	Sc 361.383	1987417.9	1987417.9	102.27	%			10:04:54
1	Y 371.029	1253652.6	1253652.6	102.02	%			10:04:54
1	Ag 328.068†	56082.4	54895.1	515.44	µg/L	515.44	ppb	10:05:00
1	As 188.979†	237.4	231.6	533.52	µg/L	533.52	ppb	10:05:21
1	B 249.677†	10746.0	10392.8	503.74	µg/L	503.74	ppb	10:05:00
1	Ba 233.527†	18059.5	17674.0	514.41	µg/L	514.41	ppb	10:05:00
1	Be 313.107†	761588.0	740878.4	515.98	µg/L	515.98	ppb	10:04:54
1	Cd 226.502†	17758.8	17500.9	515.10	µg/L	515.10	ppb	10:05:00
1	Co 228.616†	9505.0	9339.4	514.86	µg/L	514.86	ppb	10:05:00
1	Cr 267.716†	22724.6	22304.0	517.65	µg/L	517.65	ppb	10:05:00
1	Cu 324.752†	73622.3	68323.2	514.43	µg/L	514.43	ppb	10:05:00
1	Mn 257.610†	139804.2	136896.9	506.21	µg/L	506.21	ppb	10:05:00
1	Mo 202.031†	4213.5	4103.0	515.53	µg/L	515.53	ppb	10:05:21
1	Ni 231.604†	8695.4	8167.3	514.04	µg/L	514.04	ppb	10:05:00
1	P 214.914†	1322.1	1090.3	2561.3	µg/L	2561.3	ppb	10:05:21
1	Pb 220.353†	1901.7	1803.7	526.17	µg/L	526.17	ppb	10:05:21
1	S 181.975 Axial†	208.3	178.1	1021.1	µg/L	1021.1	ppb	10:05:21
1	Sb 206.836†	509.8	476.1	529.22	µg/L	529.22	ppb	10:05:21
1	Se 196.026†	343.3	323.3	529.67	µg/L	529.67	ppb	10:05:21
1	SiO2†	29247.9	26321.3	5555.7	µg/L	5555.7	ppb	10:05:00
1	Si 251.611†	32010.7	30997.1	2599.9	µg/L	2599.9	ppb	10:05:00
1	Sn 189.927†	953.7	909.1	533.23	µg/L	533.23	ppb	10:05:21
1	Ti 334.940†	212336.9	206859.7	515.58	µg/L	515.58	ppb	10:04:54
1	Tl 190.801†	284.0	300.8	522.67	µg/L	522.67	ppb	10:05:21
1	U 409.014†	5260.3	5376.8	512.07	µg/L	512.07	ppb	10:05:00
1	V 292.402†	42304.3	41489.3	521.89	µg/L	521.89	ppb	10:05:00
1	Zn 213.857†	18721.1	17635.1	510.48	µg/L	510.48	ppb	10:05:00
2	Sc RADIAL	78794.4	78794.4	103	%			10:03:56
2	Al 396.153Radial†	7561.7	7400.1	5131.2	µg/L	5131.2	ppb	10:03:56
2	Ca 317.933Radial†	6825.7	6403.0	5041.8	µg/L	5041.8	ppb	10:04:17
2	Fe 238.204 Radial†	385.9	360.3	5184.0	µg/L	5184.0	ppb	10:04:17
2	K 766.490 Radial†	8239.4	7620.9	5059.0	µg/L	5059.0	ppb	10:03:56
2	Mg 279.077 IEC†	504.5	483.6	5273.6	µg/L	5273.6	ppb	10:04:17
2	Na 589.592 Radial†	36692.3	35227.8	10116	µg/L	10116	ppb	10:03:56
2	Sr 421.552†	82261.8	79642.5	506.04	µg/L	506.04	ppb	10:03:56
2	Sc 361.383	1963776.6	1963776.6	101.05	%			10:05:27
2	Y 371.029	1237823.3	1237823.3	100.73	%			10:05:27
2	Ag 328.068†	56176.5	55648.5	522.51	µg/L	522.51	ppb	10:05:33
2	As 188.979†	229.3	226.4	521.41	µg/L	521.41	ppb	10:05:53
2	B 249.677†	10829.8	10602.2	513.94	µg/L	513.94	ppb	10:05:33
2	Ba 233.527†	18137.8	17964.1	522.86	µg/L	522.86	ppb	10:05:33
2	Be 313.107†	751862.6	740219.2	515.52	µg/L	515.52	ppb	10:05:27
2	Cd 226.502†	17744.9	17696.2	520.86	µg/L	520.86	ppb	10:05:33
2	Co 228.616†	9543.1	9489.1	523.12	µg/L	523.12	ppb	10:05:33
2	Cr 267.716†	22822.5	22668.4	526.11	µg/L	526.11	ppb	10:05:33
2	Cu 324.752†	73788.9	69354.8	522.19	µg/L	522.19	ppb	10:05:33
2	Mn 257.610†	140203.2	138937.5	513.75	µg/L	513.75	ppb	10:05:33
2	Mo 202.031†	4223.7	4162.6	523.03	µg/L	523.03	ppb	10:05:53
2	Ni 231.604†	8724.6	8298.6	522.30	µg/L	522.30	ppb	10:05:33
2	P 214.914†	1337.1	1120.7	2633.3	µg/L	2633.3	ppb	10:05:53
2	Pb 220.353†	1899.7	1824.1	532.11	µg/L	532.11	ppb	10:05:53

2	S 181.975 Axial†	207.6	179.9	1031.4 µg/L	1031.4 ppb	10:05:53
2	Sb 206.836†	518.2	490.5	545.15 µg/L	545.15 ppb	10:05:53
2	Se 196.026†	342.3	326.3	534.41 µg/L	534.41 ppb	10:05:53
2	SiO2†	29285.2	26702.5	5636.2 µg/L	5636.2 ppb	10:05:33
2	Si 251.611†	32072.6	31435.2	2636.7 µg/L	2636.7 ppb	10:05:33
2	Sn 189.927†	957.6	924.2	542.07 µg/L	542.07 ppb	10:05:53
2	Ti 334.940†	209980.2	207027.1	515.99 µg/L	515.99 ppb	10:05:27
2	Tl 190.801†	286.9	307.0	533.34 µg/L	533.34 ppb	10:05:53
2	U 409.014†	5272.9	5451.2	519.17 µg/L	519.17 ppb	10:05:33
2	V 292.402†	42466.8	42148.2	530.16 µg/L	530.16 ppb	10:05:33
2	Zn 213.857†	18784.9	17918.6	518.69 µg/L	518.69 ppb	10:05:33
3	Sc RADIAL	78235.3	78235.3	102 %		10:04:22
3	Al 396.153Radial†	7548.6	7439.9	5160.2 µg/L	5160.2 ppb	10:04:22
3	Ca 317.933Radial†	6840.1	6464.6	5090.4 µg/L	5090.4 ppb	10:04:43
3	Fe 238.204 Radial†	383.1	360.3	5182.7 µg/L	5182.7 ppb	10:04:43
3	K 766.490 Radial†	8176.5	7616.5	5056.1 µg/L	5056.1 ppb	10:04:22
3	Mg 279.077 IEC†	499.5	482.2	5257.3 µg/L	5257.3 ppb	10:04:43
3	Na 589.592 Radial†	36548.6	35342.3	10149 µg/L	10149 ppb	10:04:22
3	Sr 421.552†	81735.9	79699.3	506.40 µg/L	506.40 ppb	10:04:22
3	Sc 361.383	1972507.2	1972507.2	101.50 %		10:06:00
3	Y 371.029	1244522.4	1244522.4	101.28 %		10:06:00
3	Ag 328.068†	54764.3	54011.1	507.05 µg/L	507.05 ppb	10:06:06
3	As 188.979†	209.6	206.0	474.43 µg/L	474.43 ppb	10:06:26
3	B 249.677†	10500.3	10230.1	495.78 µg/L	495.78 ppb	10:06:06
3	Ba 233.527†	17325.3	17084.1	497.24 µg/L	497.24 ppb	10:06:06
3	Be 313.107†	740051.9	725289.6	505.13 µg/L	505.13 ppb	10:06:00
3	Cd 226.502†	17046.2	16930.1	498.28 µg/L	498.28 ppb	10:06:06
3	Co 228.616†	9069.7	8980.8	495.04 µg/L	495.04 ppb	10:06:06
3	Cr 267.716†	21321.3	21089.4	489.47 µg/L	489.47 ppb	10:06:06
3	Cu 324.752†	70407.2	65699.8	494.71 µg/L	494.71 ppb	10:06:06
3	Mn 257.610†	133221.9	131445.0	486.07 µg/L	486.07 ppb	10:06:06
3	Mo 202.031†	3737.6	3665.3	460.56 µg/L	460.56 ppb	10:06:26
3	Ni 231.604†	8310.3	7852.3	494.21 µg/L	494.21 ppb	10:06:06
3	P 214.914†	1214.5	994.1	2332.1 µg/L	2332.1 ppb	10:06:26
3	Pb 220.353†	1739.3	1657.7	483.51 µg/L	483.51 ppb	10:06:26
3	S 181.975 Axial†	199.8	171.3	982.02 µg/L	982.02 ppb	10:06:26
3	Sb 206.836†	463.6	434.4	482.49 µg/L	482.49 ppb	10:06:26
3	Se 196.026†	316.8	299.7	492.43 µg/L	492.43 ppb	10:06:26
3	SiO2†	28360.6	25663.2	5416.8 µg/L	5416.8 ppb	10:06:06
3	Si 251.611†	30927.1	30166.1	2530.2 µg/L	2530.2 ppb	10:06:06
3	Sn 189.927†	844.1	808.2	474.34 µg/L	474.34 ppb	10:06:26
3	Ti 334.940†	205918.4	202105.4	503.71 µg/L	503.71 ppb	10:06:00
3	Tl 190.801†	267.6	286.7	498.16 µg/L	498.16 ppb	10:06:26
3	U 409.014†	4957.5	5117.3	487.31 µg/L	487.31 ppb	10:06:06
3	V 292.402†	40147.9	39677.5	498.84 µg/L	498.84 ppb	10:06:06
3	Zn 213.857†	17893.0	16957.6	490.85 µg/L	490.85 ppb	10:06:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1974567.2	101.60	%	0.615				0.61%
Sc RADIAL	78653.4	102	%	0.5				0.47%
Y 371.029	1245332.8	101.35	%	0.647				0.64%
Ag 328.068†	54851.6	515.00	µg/L	7.742	515.00	ppb	7.742	1.50%
QC value within limits for Ag 328.068 Recovery = 103.00%								
Al 396.153Radial†	7419.8	5145.4	µg/L	14.48	5145.4	ppb	14.48	0.28%
QC value within limits for Al 396.153Radial Recovery = 102.91%								
As 188.979†	221.3	509.79	µg/L	31.214	509.79	ppb	31.214	6.12%
QC value within limits for As 188.979 Recovery = 101.96%								
B 249.677†	10408.4	504.48	µg/L	9.102	504.48	ppb	9.102	1.80%
QC value within limits for B 249.677 Recovery = 100.90%								
Ba 233.527†	17574.1	511.50	µg/L	13.057	511.50	ppb	13.057	2.55%
QC value within limits for Ba 233.527 Recovery = 102.30%								
Be 313.107†	735462.4	512.21	µg/L	6.140	512.21	ppb	6.140	1.20%
QC value within limits for Be 313.107 Recovery = 102.44%								
Ca 317.933Radial†	6414.4	5050.8	µg/L	35.92	5050.8	ppb	35.92	0.71%
QC value within limits for Ca 317.933Radial Recovery = 101.02%								
Cd 226.502†	17375.7	511.41	µg/L	11.734	511.41	ppb	11.734	2.29%
QC value within limits for Cd 226.502 Recovery = 102.28%								
Co 228.616†	9269.8	511.01	µg/L	14.433	511.01	ppb	14.433	2.82%

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   QC value within limits for Co 228.616  Recovery = 102.20%
Cr 267.716†            22020.6      511.08 µg/L        19.186      511.08 ppb        19.186   3.75%
   QC value within limits for Cr 267.716  Recovery = 102.22%
Cu 324.752†            67792.6      510.44 µg/L        14.168      510.44 ppb        14.168   2.78%
   QC value within limits for Cu 324.752  Recovery = 102.09%
Fe 238.204 Radial†       360.1      5180.0 µg/L          5.84      5180.0 ppb          5.84   0.11%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.60%
K 766.490 Radial†       7609.9      5051.7 µg/L         10.24      5051.7 ppb         10.24   0.20%
   QC value within limits for K 766.490 Radial  Recovery = 101.03%
Mg 279.077 IEC†          479.9      5233.4 µg/L         56.09      5233.4 ppb         56.09   1.07%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.67%
Mn 257.610†           135759.8      502.01 µg/L        14.310      502.01 ppb        14.310   2.85%
   QC value within limits for Mn 257.610  Recovery = 100.40%
Mo 202.031†            3977.0      499.71 µg/L        34.110      499.71 ppb        34.110   6.83%
   QC value within limits for Mo 202.031  Recovery = 99.94%
Na 589.592 Radial†     35290.4       10134 µg/L          16.6       10134 ppb          16.6   0.16%
   QC value within limits for Na 589.592 Radial  Recovery = 101.34%
Ni 231.604†            8106.1      510.19 µg/L        14.436      510.19 ppb        14.436   2.83%
   QC value within limits for Ni 231.604  Recovery = 102.04%
P 214.914†             1068.4      2508.9 µg/L        157.30      2508.9 ppb        157.30   6.27%
   QC value within limits for P 214.914  Recovery = 100.36%
Pb 220.353†            1761.8      513.93 µg/L        26.510      513.93 ppb        26.510   5.16%
   QC value within limits for Pb 220.353  Recovery = 102.79%
S 181.975 Axial†         176.5      1011.5 µg/L         26.06      1011.5 ppb         26.06   2.58%
   QC value within limits for S 181.975 Axial  Recovery = 101.15%
Sb 206.836†              467.0      518.95 µg/L        32.570      518.95 ppb        32.570   6.28%
   QC value within limits for Sb 206.836  Recovery = 103.79%
Se 196.026†              316.4      518.84 µg/L        22.994      518.84 ppb        22.994   4.43%
   QC value within limits for Se 196.026  Recovery = 103.77%
SiO2†                  26229.0      5536.2 µg/L        110.97      5536.2 ppb        110.97   2.00%
   QC value within limits for SiO2  Recovery = 103.53%
Si 251.611†            30866.2      2589.0 µg/L         54.07      2589.0 ppb         54.07   2.09%
   QC value within limits for Si 251.611  Recovery = 103.56%
Sn 189.927†              880.5      516.55 µg/L        36.818      516.55 ppb        36.818   7.13%
   QC value within limits for Sn 189.927  Recovery = 103.31%
Sr 421.552†            79709.2      506.47 µg/L         0.458      506.47 ppb         0.458   0.09%
   QC value within limits for Sr 421.552  Recovery = 101.29%
Ti 334.940†           205330.7      511.76 µg/L         6.970      511.76 ppb         6.970   1.36%
   QC value within limits for Ti 334.940  Recovery = 102.35%
Tl 190.801†              298.2      518.06 µg/L        18.041      518.06 ppb        18.041   3.48%
   QC value within limits for Tl 190.801  Recovery = 103.61%
U 409.014†              5315.1      506.18 µg/L        16.728      506.18 ppb        16.728   3.30%
   QC value within limits for U 409.014  Recovery = 101.24%
V 292.402†             41105.0      516.96 µg/L        16.231      516.96 ppb        16.231   3.14%
   QC value within limits for V 292.402  Recovery = 103.39%
Zn 213.857†            17503.8      506.68 µg/L        14.309      506.68 ppb        14.309   2.82%
   QC value within limits for Zn 213.857  Recovery = 101.34%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 10:06:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76167.5	76167.5	99.2	%			10:07:08
1	Al 396.153Radial†	-30.6	-2.9	-2.0154	µg/L	-2.0154	ppb	10:07:08
1	Ca 317.933Radial†	255.2	5.7	4.5179	µg/L	4.5179	ppb	10:07:28
1	Fe 238.204 Radial†	19.3	3.6	51.197	µg/L	51.197	ppb	10:07:28
1	K 766.490 Radial†	441.1	32.9	21.862	µg/L	21.862	ppb	10:07:08
1	Mg 279.077 IEC†	10.2	1.9	20.973	µg/L	20.973	ppb	10:07:28
1	Na 589.592 Radial†	435.3	-105.9	-30.403	µg/L	-30.403	ppb	10:07:08
1	Sr 421.552†	581.9	29.2	0.1856	µg/L	0.1856	ppb	10:07:08
1	Sc 361.383	1969413.2	1969413.2	101.34	%			10:08:30
1	Y 371.029	1246832.7	1246832.7	101.47	%			10:08:30
1	Ag 328.068†	-60.7	-4.8	-0.0398	µg/L	-0.0398	ppb	10:08:36
1	As 188.979†	0.1	-0.5	-1.1488	µg/L	-1.1488	ppb	10:08:56
1	B 249.677†	152.7	35.5	1.7007	µg/L	1.7007	ppb	10:08:56
1	Ba 233.527†	-18.4	-3.7	-0.1057	µg/L	-0.1057	ppb	10:08:56
1	Be 313.107†	3908.7	17.6	0.0121	µg/L	0.0121	ppb	10:08:36
1	Cd 226.502†	-131.0	6.2	0.1760	µg/L	0.1760	ppb	10:08:56
1	Co 228.616†	-47.0	-1.4	-0.0771	µg/L	-0.0771	ppb	10:08:56
1	Cr 267.716†	-72.6	11.2	0.2590	µg/L	0.2590	ppb	10:08:36
1	Cu 324.752†	3791.8	73.5	0.5594	µg/L	0.5594	ppb	10:08:36
1	Mn 257.610†	-152.5	39.1	0.1502	µg/L	0.1502	ppb	10:08:56
1	Mo 202.031†	14.5	-2.9	-0.3622	µg/L	-0.3622	ppb	10:08:56
1	Ni 231.604†	346.8	6.8	0.4307	µg/L	0.4307	ppb	10:08:56
1	P 214.914†	201.6	-3.6	-8.6519	µg/L	-8.6519	ppb	10:08:56
1	Pb 220.353†	63.7	6.9	2.0184	µg/L	2.0184	ppb	10:08:56
1	S 181.975 Axial†	23.0	-2.9	-16.436	µg/L	-16.436	ppb	10:08:56
1	Sb 206.836†	30.3	7.5	8.2873	µg/L	8.2873	ppb	10:08:56
1	Se 196.026†	6.2	-6.3	-9.7576	µg/L	-9.7576	ppb	10:08:56
1	SiO2†	2278.2	-30.7	-6.4696	µg/L	-6.4696	ppb	10:08:36
1	Si 251.611†	359.6	50.4	4.2244	µg/L	4.2244	ppb	10:08:56
1	Sn 189.927†	23.5	-0.2	-0.1263	µg/L	-0.1263	ppb	10:08:56
1	Ti 334.940†	947.6	161.4	0.4009	µg/L	0.4009	ppb	10:08:36
1	Tl 190.801†	-25.5	-2.1	-3.5935	µg/L	-3.5935	ppb	10:08:56
1	U 409.014†	-236.7	-0.6	-0.0643	µg/L	-0.0643	ppb	10:08:36
1	V 292.402†	-98.9	24.5	0.3052	µg/L	0.3052	ppb	10:08:36
1	Zn 213.857†	681.4	1.1	0.0265	µg/L	0.0265	ppb	10:08:56
2	Sc RADIAL	76583.4	76583.4	99.7	%			10:07:34
2	Al 396.153Radial†	-34.7	-6.8	-4.7669	µg/L	-4.7669	ppb	10:07:34
2	Ca 317.933Radial†	249.3	-1.6	-1.2327	µg/L	-1.2327	ppb	10:07:54
2	Fe 238.204 Radial†	18.9	3.1	43.851	µg/L	43.851	ppb	10:07:54
2	K 766.490 Radial†	421.1	10.4	6.9301	µg/L	6.9301	ppb	10:07:34
2	Mg 279.077 IEC†	11.6	3.3	35.801	µg/L	35.801	ppb	10:07:54
2	Na 589.592 Radial†	447.8	-95.7	-27.486	µg/L	-27.486	ppb	10:07:34
2	Sr 421.552†	570.3	14.4	0.0915	µg/L	0.0915	ppb	10:07:34
2	Sc 361.383	1957148.2	1957148.2	100.71	%			10:09:03
2	Y 371.029	1239345.3	1239345.3	100.86	%			10:09:03
2	Ag 328.068†	-77.2	-21.5	-0.1969	µg/L	-0.1969	ppb	10:09:08
2	As 188.979†	-0.8	-1.3	-3.0219	µg/L	-3.0219	ppb	10:09:29
2	B 249.677†	142.4	26.2	1.2534	µg/L	1.2534	ppb	10:09:29
2	Ba 233.527†	-13.9	0.7	0.0213	µg/L	0.0213	ppb	10:09:29
2	Be 313.107†	3932.3	65.2	0.0453	µg/L	0.0453	ppb	10:09:08
2	Cd 226.502†	-136.4	0.0	-0.0043	µg/L	-0.0043	ppb	10:09:29
2	Co 228.616†	-41.4	3.9	0.2174	µg/L	0.2174	ppb	10:09:29
2	Cr 267.716†	-73.1	10.2	0.2376	µg/L	0.2376	ppb	10:09:08
2	Cu 324.752†	3720.6	26.2	0.2032	µg/L	0.2032	ppb	10:09:08
2	Mn 257.610†	-152.0	38.5	0.1467	µg/L	0.1467	ppb	10:09:29
2	Mo 202.031†	28.3	10.9	1.3718	µg/L	1.3718	ppb	10:09:29
2	Ni 231.604†	346.3	8.4	0.5302	µg/L	0.5302	ppb	10:09:29
2	P 214.914†	198.4	-5.4	-13.125	µg/L	-13.125	ppb	10:09:29
2	Pb 220.353†	68.3	11.9	3.4800	µg/L	3.4800	ppb	10:09:29

2	S 181.975 Axial†	25.5	-0.2	-1.0437 µg/L	-1.0437 ppb	10:09:29
2	Sb 206.836†	28.9	6.3	7.0434 µg/L	7.0434 ppb	10:09:29
2	Se 196.026†	5.4	-7.1	-11.022 µg/L	-11.022 ppb	10:09:29
2	SiO2†	2308.7	13.7	2.8956 µg/L	2.8956 ppb	10:09:08
2	Si 251.611†	377.1	69.9	5.8641 µg/L	5.8641 ppb	10:09:29
2	Sn 189.927†	19.7	-3.8	-2.2317 µg/L	-2.2317 ppb	10:09:29
2	Ti 334.940†	910.6	130.6	0.3228 µg/L	0.3228 ppb	10:09:08
2	Tl 190.801†	-20.3	3.0	5.1015 µg/L	5.1015 ppb	10:09:29
2	U 409.014†	-278.6	-43.7	-4.1719 µg/L	-4.1719 ppb	10:09:08
2	V 292.402†	-108.6	14.3	0.1864 µg/L	0.1864 ppb	10:09:08
2	Zn 213.857†	687.0	10.8	0.3085 µg/L	0.3085 ppb	10:09:29
3	Sc RADIAL	76172.6	76172.6	99.2 %		10:08:00
3	Al 396.153Radial†	-25.3	2.4	1.6852 µg/L	1.6852 ppb	10:08:00
3	Ca 317.933Radial†	256.8	7.3	5.7840 µg/L	5.7840 ppb	10:08:20
3	Fe 238.204 Radial†	16.9	1.1	16.320 µg/L	16.320 ppb	10:08:20
3	K 766.490 Radial†	419.8	11.4	7.5461 µg/L	7.5461 ppb	10:08:00
3	Mg 279.077 IEC†	9.5	1.3	13.955 µg/L	13.955 ppb	10:08:20
3	Na 589.592 Radial†	429.4	-111.9	-32.124 µg/L	-32.124 ppb	10:08:00
3	Sr 421.552†	571.0	18.2	0.1157 µg/L	0.1157 ppb	10:08:00
3	Sc 361.383	1961861.5	1961861.5	100.95 %		10:09:35
3	Y 371.029	1241859.8	1241859.8	101.06 %		10:09:35
3	Ag 328.068†	9.7	64.7	0.6052 µg/L	0.6052 ppb	10:09:40
3	As 188.979†	-2.3	-2.8	-6.4475 µg/L	-6.4475 ppb	10:10:01
3	B 249.677†	136.8	20.3	0.9823 µg/L	0.9823 ppb	10:10:01
3	Ba 233.527†	-18.4	-3.7	-0.1059 µg/L	-0.1059 ppb	10:10:01
3	Be 313.107†	3966.3	89.6	0.0623 µg/L	0.0623 ppb	10:09:40
3	Cd 226.502†	-137.2	-0.5	-0.0152 µg/L	-0.0152 ppb	10:10:01
3	Co 228.616†	-51.8	-6.3	-0.3468 µg/L	-0.3468 ppb	10:10:01
3	Cr 267.716†	-56.1	27.2	0.6315 µg/L	0.6315 ppb	10:09:40
3	Cu 324.752†	3807.8	103.7	0.7821 µg/L	0.7821 ppb	10:09:40
3	Mn 257.610†	-157.7	33.3	0.1245 µg/L	0.1245 ppb	10:10:01
3	Mo 202.031†	16.2	-1.2	-0.1452 µg/L	-0.1452 ppb	10:10:01
3	Ni 231.604†	342.0	3.3	0.2098 µg/L	0.2098 ppb	10:10:01
3	P 214.914†	205.6	1.1	2.6470 µg/L	2.6470 ppb	10:10:01
3	Pb 220.353†	52.3	-4.1	-1.2120 µg/L	-1.2120 ppb	10:10:01
3	S 181.975 Axial†	24.8	-0.9	-5.2354 µg/L	-5.2354 ppb	10:10:01
3	Sb 206.836†	23.2	0.6	0.6139 µg/L	0.6139 ppb	10:10:01
3	Se 196.026†	11.2	-1.4	-2.0875 µg/L	-2.0875 ppb	10:10:01
3	SiO2†	2305.9	5.4	1.1466 µg/L	1.1466 ppb	10:09:40
3	Si 251.611†	369.9	61.9	5.1959 µg/L	5.1959 ppb	10:10:01
3	Sn 189.927†	25.0	1.4	0.8063 µg/L	0.8063 ppb	10:10:01
3	Ti 334.940†	942.8	160.3	0.3987 µg/L	0.3987 ppb	10:09:40
3	Tl 190.801†	-20.2	3.0	5.2028 µg/L	5.2028 ppb	10:10:01
3	U 409.014†	-216.2	18.8	1.7917 µg/L	1.7917 ppb	10:09:40
3	V 292.402†	-108.9	14.3	0.1805 µg/L	0.1805 ppb	10:09:40
3	Zn 213.857†	667.4	-10.2	-0.3015 µg/L	-0.3015 ppb	10:10:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1962807.6	101.00	%	0.318				0.32%
Sc RADIAL	76307.8	99.3	%	0.31				0.31%
Y 371.029	1242679.2	101.13	%	0.310				0.31%
Ag 328.068†	12.8	0.1228	µg/L	0.42507	0.1228	ppb	0.42507	346.04%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.4	-1.6990	µg/L	3.23767	-1.6990	ppb	3.23767	190.56%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.5	-3.5394	µg/L	2.68700	-3.5394	ppb	2.68700	75.92%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	27.4	1.3121	µg/L	0.36278	1.3121	ppb	0.36278	27.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.2	-0.0635	µg/L	0.07337	-0.0635	ppb	0.07337	115.63%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	57.5	0.0399	µg/L	0.02551	0.0399	ppb	0.02551	63.94%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.8	3.0230	µg/L	3.73955	3.0230	ppb	3.73955	123.70%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.9	0.0521	µg/L	0.10736	0.0521	ppb	0.10736	205.90%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.2	-0.0688	µg/L	0.28217	-0.0688	ppb	0.28217	410.03%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                16.2      0.3761 µg/L       0.22152      0.3761 ppb        0.22152  58.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                67.8      0.5149 µg/L       0.29200      0.5149 ppb        0.29200  56.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.6     37.123 µg/L       18.3861     37.123 ppb        18.3861  49.53%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          18.2     12.113 µg/L        8.4485     12.113 ppb         8.4485  69.75%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             2.2     23.577 µg/L       11.1531     23.577 ppb        11.1531  47.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                36.9      0.1405 µg/L       0.01393      0.1405 ppb        0.01393   9.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.2881 µg/L       0.94475      0.2881 ppb        0.94475 327.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -104.5    -30.004 µg/L        2.3442    -30.004 ppb         2.3442   7.81%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 6.2      0.3902 µg/L       0.16401      0.3902 ppb        0.16401  42.03%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.6     -6.3768 µg/L       8.12859     -6.3768 ppb        8.12859 127.47%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.9      1.4288 µg/L       2.40090      1.4288 ppb        2.40090 168.04%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.3     -7.5718 µg/L       7.95784     -7.5718 ppb        7.95784 105.10%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.8      5.3149 µg/L       4.11838      5.3149 ppb        4.11838  77.49%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.9     -7.6223 µg/L       4.83478     -7.6223 ppb        4.83478  63.43%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      -3.8     -0.8092 µg/L       4.97951     -0.8092 ppb        4.97951 615.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                60.7      5.0948 µg/L       0.82452      5.0948 ppb        0.82452  16.18%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.9     -0.5172 µg/L       1.55628     -0.5172 ppb        1.55628 300.90%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                20.6      0.1309 µg/L       0.04887      0.1309 ppb        0.04887  37.33%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               150.7      0.3741 µg/L       0.04451      0.3741 ppb        0.04451  11.90%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.3      2.2369 µg/L       5.04958      2.2369 ppb        5.04958 225.74%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 -8.5     -0.8148 µg/L       3.05180     -0.8148 ppb        3.05180 374.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 17.7      0.2241 µg/L       0.07035      0.2241 ppb        0.07035  31.40%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 0.6      0.0112 µg/L       0.30527      0.0112 ppb        0.30527 >999.9%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 10:43:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78513.9	78513.9	102	%			10:44:05
1	Al 396.153Radial†	7536.0	7401.3	5132.0	µg/L	5132.0	ppb	10:44:05
1	Ca 317.933Radial†	6914.5	6513.6	5129.0	µg/L	5129.0	ppb	10:44:05
1	Fe 238.204 Radial†	385.7	361.5	5201.7	µg/L	5201.7	ppb	10:44:26
1	K 766.490 Radial†	8205.9	7616.8	5056.3	µg/L	5056.3	ppb	10:44:05
1	Mg 279.077 IEC†	502.1	483.0	5267.1	µg/L	5267.1	ppb	10:44:26
1	Na 589.592 Radial†	36447.7	35116.3	10084	µg/L	10084	ppb	10:44:05
1	Sr 421.552†	81801.8	79479.0	505.00	µg/L	505.00	ppb	10:44:05
1	Sc 361.383	1954549.4	1954549.4	100.57	%			10:45:29
1	Y 371.029	1231977.8	1231977.8	100.26	%			10:45:29
1	Ag 328.068†	56498.5	56231.1	527.97	µg/L	527.97	ppb	10:45:35
1	As 188.979†	232.5	230.6	531.18	µg/L	531.18	ppb	10:45:55
1	B 249.677†	10800.5	10623.6	514.98	µg/L	514.98	ppb	10:45:35
1	Ba 233.527†	18218.8	18129.4	527.67	µg/L	527.67	ppb	10:45:35
1	Be 313.107†	749451.8	741334.9	516.30	µg/L	516.30	ppb	10:45:29
1	Cd 226.502†	17825.4	17859.1	525.66	µg/L	525.66	ppb	10:45:35
1	Co 228.616†	9551.4	9541.9	526.04	µg/L	526.04	ppb	10:45:35
1	Cr 267.716†	22927.7	22879.6	531.01	µg/L	531.01	ppb	10:45:35
1	Cu 324.752†	74120.3	70029.1	527.26	µg/L	527.26	ppb	10:45:35
1	Mn 257.610†	140845.7	140231.3	518.53	µg/L	518.53	ppb	10:45:35
1	Mo 202.031†	4210.8	4169.5	523.90	µg/L	523.90	ppb	10:45:55
1	Ni 231.604†	8763.2	8377.8	527.29	µg/L	527.29	ppb	10:45:35
1	P 214.914†	1325.3	1115.2	2619.7	µg/L	2619.7	ppb	10:45:55
1	Pb 220.353†	1896.8	1830.1	533.85	µg/L	533.85	ppb	10:45:55
1	S 181.975 Axial†	205.1	178.4	1022.7	µg/L	1022.7	ppb	10:45:55
1	Sb 206.836†	506.0	480.7	534.31	µg/L	534.31	ppb	10:45:55
1	Se 196.026†	343.9	329.5	539.54	µg/L	539.54	ppb	10:45:55
1	SiO2†	29407.3	26960.7	5690.7	µg/L	5690.7	ppb	10:45:35
1	Si 251.611†	32184.7	31696.5	2658.6	µg/L	2658.6	ppb	10:45:35
1	Sn 189.927†	953.8	925.0	542.53	µg/L	542.53	ppb	10:45:55
1	Ti 334.940†	209502.4	207533.0	517.25	µg/L	517.25	ppb	10:45:29
1	Tl 190.801†	290.2	311.6	541.24	µg/L	541.24	ppb	10:45:55
1	U 409.014†	5382.3	5584.5	531.89	µg/L	531.89	ppb	10:45:35
1	V 292.402†	42569.5	42448.6	533.93	µg/L	533.93	ppb	10:45:35
1	Zn 213.857†	18884.4	18105.3	524.10	µg/L	524.10	ppb	10:45:35
2	Sc RADIAL	78411.2	78411.2	102	%			10:44:31
2	Al 396.153Radial†	7565.3	7439.7	5158.8	µg/L	5158.8	ppb	10:44:31
2	Ca 317.933Radial†	6957.5	6564.7	5169.1	µg/L	5169.1	ppb	10:44:31
2	Fe 238.204 Radial†	390.8	367.0	5279.5	µg/L	5279.5	ppb	10:44:52
2	K 766.490 Radial†	8237.3	7658.1	5083.7	µg/L	5083.7	ppb	10:44:31
2	Mg 279.077 IEC†	502.6	484.1	5279.0	µg/L	5279.0	ppb	10:44:52
2	Na 589.592 Radial†	36535.2	35248.7	10122	µg/L	10122	ppb	10:44:31
2	Sr 421.552†	82142.4	79917.5	507.79	µg/L	507.79	ppb	10:44:31
2	Sc 361.383	1958001.1	1958001.1	100.75	%			10:46:02
2	Y 371.029	1233368.8	1233368.8	100.37	%			10:46:02
2	Ag 328.068†	56268.4	55903.7	524.91	µg/L	524.91	ppb	10:46:07
2	As 188.979†	234.4	232.1	534.69	µg/L	534.69	ppb	10:46:28
2	B 249.677†	10778.1	10582.5	512.93	µg/L	512.93	ppb	10:46:07
2	Ba 233.527†	18146.0	18025.1	524.63	µg/L	524.63	ppb	10:46:07
2	Be 313.107†	751383.0	741938.1	516.72	µg/L	516.72	ppb	10:46:02
2	Cd 226.502†	17820.5	17823.0	524.58	µg/L	524.58	ppb	10:46:07
2	Co 228.616†	9569.7	9543.3	526.11	µg/L	526.11	ppb	10:46:07
2	Cr 267.716†	22832.8	22745.2	527.89	µg/L	527.89	ppb	10:46:07
2	Cu 324.752†	73978.2	69758.1	525.23	µg/L	525.23	ppb	10:46:07
2	Mn 257.610†	140456.0	139597.6	516.20	µg/L	516.20	ppb	10:46:07
2	Mo 202.031†	4193.6	4145.1	520.84	µg/L	520.84	ppb	10:46:28
2	Ni 231.604†	8724.2	8323.7	523.88	µg/L	523.88	ppb	10:46:07
2	P 214.914†	1323.8	1111.4	2610.6	µg/L	2610.6	ppb	10:46:28
2	Pb 220.353†	1904.1	1834.0	534.98	µg/L	534.98	ppb	10:46:28

2	S 181.975 Axial†	210.5	183.4	1051.2 µg/L	1051.2 ppb	10:46:28
2	Sb 206.836†	507.8	481.6	535.27 µg/L	535.27 ppb	10:46:28
2	Se 196.026†	348.8	333.7	546.55 µg/L	546.55 ppb	10:46:28
2	SiO2†	29307.2	26809.8	5658.8 µg/L	5658.8 ppb	10:46:07
2	Si 251.611†	32151.4	31607.0	2651.1 µg/L	2651.1 ppb	10:46:07
2	Sn 189.927†	942.9	912.4	535.21 µg/L	535.21 ppb	10:46:28
2	Ti 334.940†	209831.5	207492.4	517.15 µg/L	517.15 ppb	10:46:02
2	Tl 190.801†	285.3	306.2	532.00 µg/L	532.00 ppb	10:46:28
2	U 409.014†	5250.4	5444.2	518.49 µg/L	518.49 ppb	10:46:07
2	V 292.402†	42463.4	42268.7	531.65 µg/L	531.65 ppb	10:46:07
2	Zn 213.857†	18798.0	17986.5	520.66 µg/L	520.66 ppb	10:46:07
3	Sc RADIAL	78677.8	78677.8	102 %		10:44:57
3	Al 396.153Radial†	7601.5	7450.0	5167.1 µg/L	5167.1 ppb	10:44:57
3	Ca 317.933Radial†	7000.3	6583.3	5183.8 µg/L	5183.8 ppb	10:44:57
3	Fe 238.204 Radial†	389.2	364.1	5238.1 µg/L	5238.1 ppb	10:45:18
3	K 766.490 Radial†	8250.9	7644.1	5074.4 µg/L	5074.4 ppb	10:44:57
3	Mg 279.077 IEC†	496.0	476.0	5189.4 µg/L	5189.4 ppb	10:45:18
3	Na 589.592 Radial†	36665.7	35254.9	10124 µg/L	10124 ppb	10:44:57
3	Sr 421.552†	82476.5	79970.9	508.13 µg/L	508.13 ppb	10:44:57
3	Sc 361.383	1957852.7	1957852.7	100.74 %		10:46:35
3	Y 371.029	1234064.2	1234064.2	100.43 %		10:46:35
3	Ag 328.068†	55199.0	54846.5	514.89 µg/L	514.89 ppb	10:46:40
3	As 188.979†	212.5	210.4	484.69 µg/L	484.69 ppb	10:47:01
3	B 249.677†	10512.0	10319.2	500.09 µg/L	500.09 ppb	10:46:40
3	Ba 233.527†	17466.9	17352.4	505.05 µg/L	505.05 ppb	10:46:40
3	Be 313.107†	733721.1	724463.0	504.55 µg/L	504.55 ppb	10:46:35
3	Cd 226.502†	17120.9	17129.9	504.16 µg/L	504.16 ppb	10:46:40
3	Co 228.616†	9119.4	9097.0	501.46 µg/L	501.46 ppb	10:46:40
3	Cr 267.716†	21478.3	21402.5	496.73 µg/L	496.73 ppb	10:46:40
3	Cu 324.752†	70907.4	66715.5	502.35 µg/L	502.35 ppb	10:46:40
3	Mn 257.610†	134079.5	133278.8	492.85 µg/L	492.85 ppb	10:46:40
3	Mo 202.031†	3726.5	3681.8	462.64 µg/L	462.64 ppb	10:47:01
3	Ni 231.604†	8385.7	7988.4	502.78 µg/L	502.78 ppb	10:46:40
3	P 214.914†	1214.3	1002.8	2352.2 µg/L	2352.2 ppb	10:47:01
3	Pb 220.353†	1729.9	1661.2	484.52 µg/L	484.52 ppb	10:47:01
3	S 181.975 Axial†	196.3	169.3	970.71 µg/L	970.71 ppb	10:47:01
3	Sb 206.836†	468.1	442.2	491.10 µg/L	491.10 ppb	10:47:01
3	Se 196.026†	318.6	303.8	499.19 µg/L	499.19 ppb	10:47:01
3	SiO2†	28433.0	25944.3	5476.1 µg/L	5476.1 ppb	10:46:40
3	Si 251.611†	31087.2	30553.1	2562.7 µg/L	2562.7 ppb	10:46:40
3	Sn 189.927†	837.0	807.4	473.89 µg/L	473.89 ppb	10:47:01
3	Ti 334.940†	204322.8	202040.2	503.56 µg/L	503.56 ppb	10:46:35
3	Tl 190.801†	267.8	288.9	501.96 µg/L	501.96 ppb	10:47:01
3	U 409.014†	4911.2	5107.9	486.40 µg/L	486.40 ppb	10:46:40
3	V 292.402†	40442.4	40265.8	506.19 µg/L	506.19 ppb	10:46:40
3	Zn 213.857†	18056.4	17251.7	499.37 µg/L	499.37 ppb	10:46:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1956801.1	100.69	%	0.100				0.10%
Sc RADIAL	78534.3	102	%	0.2				0.17%
Y 371.029	1233137.0	100.35	%	0.086				0.09%
Ag 328.068†	55660.4	522.59	µg/L	6.844	522.59	ppb	6.844	1.31%
QC value within limits for Ag 328.068 Recovery = 104.52%								
Al 396.153Radial†	7430.3	5152.7	µg/L	18.33	5152.7	ppb	18.33	0.36%
QC value within limits for Al 396.153Radial Recovery = 103.05%								
As 188.979†	224.4	516.85	µg/L	27.908	516.85	ppb	27.908	5.40%
QC value within limits for As 188.979 Recovery = 103.37%								
B 249.677†	10508.4	509.33	µg/L	8.068	509.33	ppb	8.068	1.58%
QC value within limits for B 249.677 Recovery = 101.87%								
Ba 233.527†	17835.6	519.12	µg/L	12.279	519.12	ppb	12.279	2.37%
QC value within limits for Ba 233.527 Recovery = 103.82%								
Be 313.107†	735912.0	512.52	µg/L	6.908	512.52	ppb	6.908	1.35%
QC value within limits for Be 313.107 Recovery = 102.50%								
Ca 317.933Radial†	6553.9	5160.6	µg/L	28.39	5160.6	ppb	28.39	0.55%
QC value within limits for Ca 317.933Radial Recovery = 103.21%								
Cd 226.502†	17604.0	518.14	µg/L	12.112	518.14	ppb	12.112	2.34%
QC value within limits for Cd 226.502 Recovery = 103.63%								
Co 228.616†	9394.1	517.87	µg/L	14.213	517.87	ppb	14.213	2.74%

QC value within limits for Co 228.616 Recovery = 103.57%

Cr 267.716†	22342.4	518.55 µg/L	18.955	518.55 ppb	18.955	3.66%

QC value within limits for Cr 267.716 Recovery = 103.71%

Cu 324.752†	68834.3	518.28 µg/L	13.833	518.28 ppb	13.833	2.67%

QC value within limits for Cu 324.752 Recovery = 103.66%

Fe 238.204 Radial†	364.2	5239.8 µg/L	38.95	5239.8 ppb	38.95	0.74%

QC value within limits for Fe 238.204 Radial Recovery = 104.80%

K 766.490 Radial†	7639.7	5071.5 µg/L	13.94	5071.5 ppb	13.94	0.27%

QC value within limits for K 766.490 Radial Recovery = 101.43%

Mg 279.077 IEC†	481.0	5245.2 µg/L	48.62	5245.2 ppb	48.62	0.93%

QC value within limits for Mg 279.077 IEC Recovery = 104.90%

Mn 257.610†	137702.6	509.19 µg/L	14.199	509.19 ppb	14.199	2.79%

QC value within limits for Mn 257.610 Recovery = 101.84%

Mo 202.031†	3998.8	502.46 µg/L	34.518	502.46 ppb	34.518	6.87%

QC value within limits for Mo 202.031 Recovery = 100.49%

Na 589.592 Radial†	35206.6	10110 µg/L	22.5	10110 ppb	22.5	0.22%

QC value within limits for Na 589.592 Radial Recovery = 101.10%

Ni 231.604†	8230.0	517.99 µg/L	13.275	517.99 ppb	13.275	2.56%

QC value within limits for Ni 231.604 Recovery = 103.60%

P 214.914†	1076.5	2527.5 µg/L	151.90	2527.5 ppb	151.90	6.01%

QC value within limits for P 214.914 Recovery = 101.10%

Pb 220.353†	1775.1	517.78 µg/L	28.812	517.78 ppb	28.812	5.56%

QC value within limits for Pb 220.353 Recovery = 103.56%

S 181.975 Axial†	177.0	1014.9 µg/L	40.83	1014.9 ppb	40.83	4.02%

QC value within limits for S 181.975 Axial Recovery = 101.49%

Sb 206.836†	468.2	520.23 µg/L	25.228	520.23 ppb	25.228	4.85%

QC value within limits for Sb 206.836 Recovery = 104.05%

Se 196.026†	322.3	528.42 µg/L	25.561	528.42 ppb	25.561	4.84%

QC value within limits for Se 196.026 Recovery = 105.68%

SiO2†	26571.6	5608.5 µg/L	115.77	5608.5 ppb	115.77	2.06%

QC value within limits for SiO2 Recovery = 104.88%

Si 251.611†	31285.6	2624.1 µg/L	53.34	2624.1 ppb	53.34	2.03%

QC value within limits for Si 251.611 Recovery = 104.97%

Sn 189.927†	881.6	517.21 µg/L	37.692	517.21 ppb	37.692	7.29%

QC value within limits for Sn 189.927 Recovery = 103.44%

Sr 421.552†	79789.1	506.97 µg/L	1.715	506.97 ppb	1.715	0.34%

QC value within limits for Sr 421.552 Recovery = 101.39%

Ti 334.940†	205688.5	512.65 µg/L	7.876	512.65 ppb	7.876	1.54%

QC value within limits for Ti 334.940 Recovery = 102.53%

Tl 190.801†	302.2	525.07 µg/L	20.534	525.07 ppb	20.534	3.91%

QC value within limits for Tl 190.801 Recovery = 105.01%

U 409.014†	5378.9	512.26 µg/L	23.375	512.26 ppb	23.375	4.56%

QC value within limits for U 409.014 Recovery = 102.45%

V 292.402†	41661.1	523.93 µg/L	15.400	523.93 ppb	15.400	2.94%

QC value within limits for V 292.402 Recovery = 104.79%

Zn 213.857†	17781.2	514.71 µg/L	13.395	514.71 ppb	13.395	2.60%

QC value within limits for Zn 213.857 Recovery = 102.94%

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 10:47:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76008.7	76008.7	98.9	%			10:47:43
1	Al 396.153Radial†	-21.8	5.9	4.0787	µg/L	4.0787	ppb	10:47:43
1	Ca 317.933Radial†	251.6	2.6	2.0467	µg/L	2.0467	ppb	10:48:03
1	Fe 238.204 Radial†	18.6	2.9	42.032	µg/L	42.032	ppb	10:48:03
1	K 766.490 Radial†	390.7	-17.1	-11.359	µg/L	-11.359	ppb	10:47:43
1	Mg 279.077 IEC†	8.0	-0.2	-2.1102	µg/L	-2.1102	ppb	10:48:03
1	Na 589.592 Radial†	396.9	-143.8	-41.302	µg/L	-41.302	ppb	10:47:43
1	Sr 421.552†	561.3	9.6	0.0610	µg/L	0.0610	ppb	10:47:43
1	Sc 361.383	1955243.1	1955243.1	100.61	%			10:49:05
1	Y 371.029	1236657.7	1236657.7	100.64	%			10:49:05
1	Ag 328.068†	-40.2	15.1	0.1460	µg/L	0.1460	ppb	10:49:11
1	As 188.979†	-2.3	-2.9	-6.6202	µg/L	-6.6202	ppb	10:49:31
1	B 249.677†	124.4	8.5	0.3896	µg/L	0.3896	ppb	10:49:31
1	Ba 233.527†	-15.5	-0.9	-0.0246	µg/L	-0.0246	ppb	10:49:31
1	Be 313.107†	3959.5	96.0	0.0668	µg/L	0.0668	ppb	10:49:11
1	Cd 226.502†	-132.8	3.4	0.0962	µg/L	0.0962	ppb	10:49:31
1	Co 228.616†	-43.7	1.6	0.0876	µg/L	0.0876	ppb	10:49:31
1	Cr 267.716†	-107.7	-24.3	-0.5626	µg/L	-0.5626	ppb	10:49:11
1	Cu 324.752†	3653.7	-36.6	-0.2694	µg/L	-0.2694	ppb	10:49:11
1	Mn 257.610†	-164.5	26.0	0.1018	µg/L	0.1018	ppb	10:49:31
1	Mo 202.031†	19.3	2.0	0.2532	µg/L	0.2532	ppb	10:49:31
1	Ni 231.604†	342.5	5.0	0.3152	µg/L	0.3152	ppb	10:49:31
1	P 214.914†	212.8	9.1	21.731	µg/L	21.731	ppb	10:49:31
1	Pb 220.353†	51.1	-5.2	-1.5144	µg/L	-1.5144	ppb	10:49:31
1	S 181.975 Axial†	22.1	-3.6	-20.420	µg/L	-20.420	ppb	10:49:31
1	Sb 206.836†	26.0	3.4	3.7744	µg/L	3.7744	ppb	10:49:31
1	Se 196.026†	14.3	1.8	2.9467	µg/L	2.9467	ppb	10:49:31
1	SiO2†	2259.4	-33.1	-6.9784	µg/L	-6.9784	ppb	10:49:11
1	Si 251.611†	323.5	17.0	1.4283	µg/L	1.4283	ppb	10:49:31
1	Sn 189.927†	26.6	3.0	1.7574	µg/L	1.7574	ppb	10:49:31
1	Ti 334.940†	867.9	89.0	0.2222	µg/L	0.2222	ppb	10:49:11
1	Tl 190.801†	-24.7	-1.5	-2.4954	µg/L	-2.4954	ppb	10:49:31
1	U 409.014†	-136.5	97.3	9.2813	µg/L	9.2813	ppb	10:49:11
1	V 292.402†	-91.1	31.6	0.4058	µg/L	0.4058	ppb	10:49:11
1	Zn 213.857†	671.7	-3.7	-0.1110	µg/L	-0.1110	ppb	10:49:31
2	Sc RADIAL	76146.3	76146.3	99.1	%			10:48:09
2	Al 396.153Radial†	-21.7	6.1	4.1372	µg/L	4.1372	ppb	10:48:09
2	Ca 317.933Radial†	251.6	2.1	1.6909	µg/L	1.6909	ppb	10:48:29
2	Fe 238.204 Radial†	17.5	1.8	25.688	µg/L	25.688	ppb	10:48:29
2	K 766.490 Radial†	449.6	41.6	27.633	µg/L	27.633	ppb	10:48:09
2	Mg 279.077 IEC†	5.5	-2.8	-29.940	µg/L	-29.940	ppb	10:48:29
2	Na 589.592 Radial†	363.7	-178.0	-51.104	µg/L	-51.104	ppb	10:48:09
2	Sr 421.552†	597.8	45.4	0.2883	µg/L	0.2883	ppb	10:48:09
2	Sc 361.383	1943449.8	1943449.8	100.00	%			10:49:37
2	Y 371.029	1227540.6	1227540.6	99.898	%			10:49:37
2	Ag 328.068†	-42.7	12.4	0.1171	µg/L	0.1171	ppb	10:49:43
2	As 188.979†	1.0	0.5	1.1289	µg/L	1.1289	ppb	10:50:03
2	B 249.677†	132.2	17.0	0.8157	µg/L	0.8157	ppb	10:50:03
2	Ba 233.527†	-9.2	5.3	0.1539	µg/L	0.1539	ppb	10:50:03
2	Be 313.107†	3842.9	3.4	0.0023	µg/L	0.0023	ppb	10:49:43
2	Cd 226.502†	-127.2	8.3	0.2427	µg/L	0.2427	ppb	10:50:03
2	Co 228.616†	-44.8	0.2	0.0143	µg/L	0.0143	ppb	10:50:03
2	Cr 267.716†	-71.6	11.2	0.2588	µg/L	0.2588	ppb	10:49:43
2	Cu 324.752†	3603.3	-65.0	-0.4854	µg/L	-0.4854	ppb	10:49:43
2	Mn 257.610†	-168.1	21.4	0.0835	µg/L	0.0835	ppb	10:50:03
2	Mo 202.031†	53.1	35.9	4.5109	µg/L	4.5109	ppb	10:50:03
2	Ni 231.604†	349.1	13.7	0.8635	µg/L	0.8635	ppb	10:50:03
2	P 214.914†	209.8	7.4	17.679	µg/L	17.679	ppb	10:50:03
2	Pb 220.353†	57.5	1.6	0.4878	µg/L	0.4878	ppb	10:50:03

2	S 181.975 Axial†	22.0	-3.5	-20.136 µg/L	-20.136 ppb	10:50:03
2	Sb 206.836†	29.4	7.0	7.7725 µg/L	7.7725 ppb	10:50:03
2	Se 196.026†	9.0	-3.4	-5.3378 µg/L	-5.3378 ppb	10:50:03
2	SiO2†	2262.4	-16.4	-3.4659 µg/L	-3.4659 ppb	10:49:43
2	Si 251.611†	338.0	33.4	2.8052 µg/L	2.8052 ppb	10:50:03
2	Sn 189.927†	27.5	4.1	2.4020 µg/L	2.4020 ppb	10:50:03
2	Ti 334.940†	800.7	27.0	0.0698 µg/L	0.0698 ppb	10:49:43
2	Tl 190.801†	-22.4	0.7	1.1611 µg/L	1.1611 ppb	10:50:03
2	U 409.014†	-286.6	-53.6	-5.1200 µg/L	-5.1200 ppb	10:49:43
2	V 292.402†	-120.6	1.6	0.0510 µg/L	0.0510 ppb	10:49:43
2	Zn 213.857†	682.3	11.0	0.3178 µg/L	0.3178 ppb	10:50:03
3	Sc RADIAL	75638.4	75638.4	98.5 %		10:48:35
3	Al 396.153Radial†	4.0	32.0	22.223 µg/L	22.223 ppb	10:48:35
3	Ca 317.933Radial†	258.9	11.3	8.8892 µg/L	8.8892 ppb	10:48:55
3	Fe 238.204 Radial†	17.7	2.1	29.839 µg/L	29.839 ppb	10:48:55
3	K 766.490 Radial†	409.6	4.0	2.6742 µg/L	2.6742 ppb	10:48:35
3	Mg 279.077 IEC†	9.5	1.4	14.850 µg/L	14.850 ppb	10:48:55
3	Na 589.592 Radial†	375.1	-164.0	-47.098 µg/L	-47.098 ppb	10:48:35
3	Sr 421.552†	572.2	23.4	0.1487 µg/L	0.1487 ppb	10:48:35
3	Sc 361.383	1950011.6	1950011.6	100.34 %		10:50:09
3	Y 371.029	1233227.8	1233227.8	100.36 %		10:50:09
3	Ag 328.068†	-49.2	6.0	0.0572 µg/L	0.0572 ppb	10:50:15
3	As 188.979†	-3.5	-4.0	-9.2421 µg/L	-9.2421 ppb	10:50:35
3	B 249.677†	106.0	-9.5	-0.4785 µg/L	-0.4785 ppb	10:50:35
3	Ba 233.527†	-15.6	-1.0	-0.0307 µg/L	-0.0307 ppb	10:50:35
3	Be 313.107†	3891.1	38.5	0.0268 µg/L	0.0268 ppb	10:50:15
3	Cd 226.502†	-131.3	4.6	0.1318 µg/L	0.1318 ppb	10:50:35
3	Co 228.616†	-38.2	7.0	0.3848 µg/L	0.3848 ppb	10:50:35
3	Cr 267.716†	-79.4	3.7	0.0849 µg/L	0.0849 ppb	10:50:15
3	Cu 324.752†	3608.9	-71.5	-0.5335 µg/L	-0.5335 ppb	10:50:15
3	Mn 257.610†	-160.9	29.1	0.1110 µg/L	0.1110 ppb	10:50:35
3	Mo 202.031†	23.9	6.6	0.8360 µg/L	0.8360 ppb	10:50:35
3	Ni 231.604†	344.2	7.6	0.4768 µg/L	0.4768 ppb	10:50:35
3	P 214.914†	205.6	2.5	5.9294 µg/L	5.9294 ppb	10:50:35
3	Pb 220.353†	58.2	2.0	0.5951 µg/L	0.5951 ppb	10:50:35
3	S 181.975 Axial†	24.7	-0.9	-5.2178 µg/L	-5.2178 ppb	10:50:35
3	Sb 206.836†	23.6	1.1	1.2096 µg/L	1.2096 ppb	10:50:35
3	Se 196.026†	10.5	-1.9	-2.9260 µg/L	-2.9260 ppb	10:50:35
3	SiO2†	2248.7	-37.7	-7.9509 µg/L	-7.9509 ppb	10:50:15
3	Si 251.611†	352.3	46.6	3.9115 µg/L	3.9115 ppb	10:50:35
3	Sn 189.927†	22.7	-0.8	-0.4409 µg/L	-0.4409 ppb	10:50:35
3	Ti 334.940†	798.8	22.4	0.0549 µg/L	0.0549 ppb	10:50:15
3	Tl 190.801†	-21.3	1.8	3.1524 µg/L	3.1524 ppb	10:50:35
3	U 409.014†	-239.9	-6.1	-0.5894 µg/L	-0.5894 ppb	10:50:15
3	V 292.402†	-135.1	-12.5	-0.1480 µg/L	-0.1480 ppb	10:50:15
3	Zn 213.857†	673.4	-0.2	-0.0080 µg/L	-0.0080 ppb	10:50:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1949568.2	100.32	%	0.304				0.30%
Sc RADIAL	75931.1	98.8	%	0.34				0.35%
Y 371.029	1232475.4	100.30	%	0.375				0.37%
Ag 328.068†	11.2	0.1068	µg/L	0.04532	0.1068	ppb	0.04532	42.45%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.7	10.146	µg/L	10.4589	10.146	ppb	10.4589	103.08%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.1	-4.9111	µg/L	5.39262	-4.9111	ppb	5.39262	109.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	5.3	0.2423	µg/L	0.65954	0.2423	ppb	0.65954	272.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.1	0.0329	µg/L	0.10483	0.0329	ppb	0.10483	319.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	46.0	0.0320	µg/L	0.03257	0.0320	ppb	0.03257	101.85%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.3	4.2089	µg/L	4.05714	4.2089	ppb	4.05714	96.39%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.4	0.1569	µg/L	0.07640	0.1569	ppb	0.07640	48.69%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.9	0.1622	µg/L	0.19624	0.1622	ppb	0.19624	120.96%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -3.1     -0.0730 µg/L       0.43289     -0.0730 ppb        0.43289 593.11%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -57.7     -0.4294 µg/L       0.14068     -0.4294 ppb        0.14068  32.76%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        2.3      32.519 µg/L        8.4954      32.519 ppb         8.4954  26.12%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         9.5      6.3160 µg/L      19.74940      6.3160 ppb       19.74940 312.69%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.5     -5.7335 µg/L      22.61400     -5.7335 ppb       22.61400 394.42%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              25.5      0.0988 µg/L       0.01400      0.0988 ppb        0.01400  14.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              14.9      1.8667 µg/L       2.30843      1.8667 ppb        2.30843 123.66%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -161.9     -46.501 µg/L       4.9282     -46.501 ppb         4.9282  10.60%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               8.8      0.5518 µg/L       0.28176      0.5518 ppb        0.28176  51.06%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                6.3      15.113 µg/L        8.2074      15.113 ppb         8.2074  54.31%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -0.5     -0.1438 µg/L       1.18818     -0.1438 ppb        1.18818 826.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.7     -15.258 µg/L        8.6963     -15.258 ppb         8.6963  56.99%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               3.8      4.2522 µg/L       3.30745      4.2522 ppb        3.30745  77.78%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.2     -1.7724 µg/L       4.26103     -1.7724 ppb        4.26103 240.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -29.1     -6.1317 µg/L       2.35929     -6.1317 ppb        2.35929  38.48%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              32.4      2.7150 µg/L       1.24407      2.7150 ppb        1.24407  45.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.1      1.2395 µg/L       1.49054      1.2395 ppb        1.49054 120.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              26.1      0.1660 µg/L       0.11463      0.1660 ppb        0.11463  69.06%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              46.2      0.1156 µg/L       0.09257      0.1156 ppb        0.09257  80.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.4      0.6060 µg/L       2.86452      0.6060 ppb        2.86452 472.68%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               12.5      1.1906 µg/L       7.36379      1.1906 ppb        7.36379 618.48%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                6.9      0.1029 µg/L       0.28052      0.1029 ppb        0.28052 272.56%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               2.4      0.0663 µg/L       0.22382      0.0663 ppb        0.22382 337.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 31
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 11:20:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77806.3	77806.3	101	%			11:20:50
1	Al 396.153Radial†	7544.3	7476.6	5184.2	µg/L	5184.2	ppb	11:20:50
1	Ca 317.933Radial†	6907.7	6568.5	5172.2	µg/L	5172.2	ppb	11:20:50
1	Fe 238.204 Radial†	388.6	367.8	5291.8	µg/L	5291.8	ppb	11:21:10
1	K 766.490 Radial†	8244.7	7728.1	5130.2	µg/L	5130.2	ppb	11:20:50
1	Mg 279.077 IEC†	499.8	485.2	5290.9	µg/L	5290.9	ppb	11:21:10
1	Na 589.592 Radial†	36305.3	35300.1	10137	µg/L	10137	ppb	11:20:50
1	Sr 421.552†	81410.8	79820.8	507.17	µg/L	507.17	ppb	11:20:50
1	Sc 361.383	1939437.2	1939437.2	99.796	%			11:22:14
1	Y 371.029	1221612.2	1221612.2	99.415	%			11:22:14
1	Ag 328.068†	56270.6	56440.5	529.96	µg/L	529.96	ppb	11:22:19
1	As 188.979†	234.4	234.3	539.68	µg/L	539.68	ppb	11:22:40
1	B 249.677†	10787.9	10694.7	518.39	µg/L	518.39	ppb	11:22:19
1	Ba 233.527†	18264.0	18315.8	533.09	µg/L	533.09	ppb	11:22:19
1	Be 313.107†	747082.8	744767.4	518.69	µg/L	518.69	ppb	11:22:14
1	Cd 226.502†	17899.9	18071.9	531.92	µg/L	531.92	ppb	11:22:19
1	Co 228.616†	9599.1	9663.7	532.77	µg/L	532.77	ppb	11:22:19
1	Cr 267.716†	22894.5	23024.0	534.36	µg/L	534.36	ppb	11:22:19
1	Cu 324.752†	73668.5	70150.6	528.19	µg/L	528.19	ppb	11:22:19
1	Mn 257.610†	141181.3	141658.8	523.81	µg/L	523.81	ppb	11:22:19
1	Mo 202.031†	4237.5	4229.0	531.37	µg/L	531.37	ppb	11:22:40
1	Ni 231.604†	8809.2	8491.8	534.46	µg/L	534.46	ppb	11:22:19
1	P 214.914†	1341.8	1142.0	2683.8	µg/L	2683.8	ppb	11:22:40
1	Pb 220.353†	1904.6	1852.6	540.43	µg/L	540.43	ppb	11:22:40
1	S 181.975 Axial†	205.8	180.7	1035.7	µg/L	1035.7	ppb	11:22:40
1	Sb 206.836†	505.3	483.9	537.93	µg/L	537.93	ppb	11:22:40
1	Se 196.026†	343.1	331.4	542.89	µg/L	542.89	ppb	11:22:40
1	SiO2†	29325.7	27106.7	5721.5	µg/L	5721.5	ppb	11:22:19
1	Si 251.611†	32125.5	31886.5	2674.5	µg/L	2674.5	ppb	11:22:19
1	Sn 189.927†	961.7	940.3	551.47	µg/L	551.47	ppb	11:22:40
1	Ti 334.940†	208267.9	207919.1	518.21	µg/L	518.21	ppb	11:22:14
1	Tl 190.801†	287.0	310.7	539.64	µg/L	539.64	ppb	11:22:40
1	U 409.014†	5308.5	5552.3	528.80	µg/L	528.80	ppb	11:22:19
1	V 292.402†	42604.6	42813.6	538.54	µg/L	538.54	ppb	11:22:19
1	Zn 213.857†	18902.3	18269.6	528.86	µg/L	528.86	ppb	11:22:19
2	Sc RADIAL	77699.9	77699.9	101	%			11:21:16
2	Al 396.153Radial†	7499.3	7442.3	5160.5	µg/L	5160.5	ppb	11:21:16
2	Ca 317.933Radial†	6949.4	6619.0	5212.0	µg/L	5212.0	ppb	11:21:16
2	Fe 238.204 Radial†	385.2	365.0	5250.9	µg/L	5250.9	ppb	11:21:36
2	K 766.490 Radial†	8225.9	7720.7	5125.3	µg/L	5125.3	ppb	11:21:16
2	Mg 279.077 IEC†	497.4	483.5	5272.7	µg/L	5272.7	ppb	11:21:36
2	Na 589.592 Radial†	36326.3	35369.8	10157	µg/L	10157	ppb	11:21:16
2	Sr 421.552†	81673.5	80190.6	509.52	µg/L	509.52	ppb	11:21:16
2	Sc 361.383	1955286.0	1955286.0	100.61	%			11:22:46
2	Y 371.029	1231522.4	1231522.4	100.22	%			11:22:46
2	Ag 328.068†	56578.2	56289.1	528.53	µg/L	528.53	ppb	11:22:52
2	As 188.979†	238.8	236.8	545.43	µg/L	545.43	ppb	11:23:13
2	B 249.677†	10865.4	10684.1	517.89	µg/L	517.89	ppb	11:22:52
2	Ba 233.527†	18340.0	18243.0	530.97	µg/L	530.97	ppb	11:22:52
2	Be 313.107†	752555.6	744139.0	518.25	µg/L	518.25	ppb	11:22:46
2	Cd 226.502†	17976.0	18002.1	529.86	µg/L	529.86	ppb	11:22:52
2	Co 228.616†	9639.4	9625.8	530.67	µg/L	530.67	ppb	11:22:52
2	Cr 267.716†	23013.7	22956.5	532.80	µg/L	532.80	ppb	11:22:52
2	Cu 324.752†	74018.1	69899.7	526.29	µg/L	526.29	ppb	11:22:52
2	Mn 257.610†	141723.9	141051.4	521.56	µg/L	521.56	ppb	11:22:52
2	Mo 202.031†	4236.7	4193.8	526.94	µg/L	526.94	ppb	11:23:13
2	Ni 231.604†	8822.1	8433.0	530.76	µg/L	530.76	ppb	11:22:52
2	P 214.914†	1331.5	1120.9	2633.4	µg/L	2633.4	ppb	11:23:13
2	Pb 220.353†	1907.7	1840.2	536.81	µg/L	536.81	ppb	11:23:13

2	S 181.975 Axial†	207.7	181.0	1037.3 µg/L	1037.3 ppb	11:23:13
2	Sb 206.836†	517.0	491.4	546.19 µg/L	546.19 ppb	11:23:13
2	Se 196.026†	347.2	332.7	544.82 µg/L	544.82 ppb	11:23:13
2	SiO2†	29463.0	27005.0	5700.0 µg/L	5700.0 ppb	11:22:52
2	Si 251.611†	32234.5	31734.0	2661.7 µg/L	2661.7 ppb	11:22:52
2	Sn 189.927†	951.0	921.8	540.71 µg/L	540.71 ppb	11:23:13
2	Ti 334.940†	209745.0	207695.6	517.66 µg/L	517.66 ppb	11:22:46
2	Tl 190.801†	286.5	307.8	534.72 µg/L	534.72 ppb	11:23:13
2	U 409.014†	5315.2	5515.8	525.32 µg/L	525.32 ppb	11:22:52
2	V 292.402†	42766.2	42628.2	536.19 µg/L	536.19 ppb	11:22:52
2	Zn 213.857†	19005.0	18218.1	527.38 µg/L	527.38 ppb	11:22:52
3	Sc RADIAL	78076.8	78076.8	102 %		11:21:42
3	Al 396.153Radial†	7523.4	7430.2	5153.3 µg/L	5153.3 ppb	11:21:42
3	Ca 317.933Radial†	6951.1	6587.5	5187.2 µg/L	5187.2 ppb	11:21:42
3	Fe 238.204 Radial†	384.8	362.7	5218.3 µg/L	5218.3 ppb	11:22:02
3	K 766.490 Radial†	8208.5	7664.4	5087.9 µg/L	5087.9 ppb	11:21:42
3	Mg 279.077 IEC†	496.9	480.6	5240.4 µg/L	5240.4 ppb	11:22:02
3	Na 589.592 Radial†	36364.7	35234.3	10118 µg/L	10118 ppb	11:21:42
3	Sr 421.552†	81691.6	79818.6	507.16 µg/L	507.16 ppb	11:21:42
3	Sc 361.383	1955252.3	1955252.3	100.61 %		11:23:19
3	Y 371.029	1231691.3	1231691.3	100.24 %		11:23:19
3	Ag 328.068†	54769.1	54492.1	511.57 µg/L	511.57 ppb	11:23:25
3	As 188.979†	212.0	210.2	484.11 µg/L	484.11 ppb	11:23:46
3	B 249.677†	10417.4	10239.0	496.20 µg/L	496.20 ppb	11:23:25
3	Ba 233.527†	17348.3	17257.6	502.29 µg/L	502.29 ppb	11:23:25
3	Be 313.107†	737556.4	729243.7	507.88 µg/L	507.88 ppb	11:23:19
3	Cd 226.502†	16993.2	17025.6	501.09 µg/L	501.09 ppb	11:23:25
3	Co 228.616†	9078.3	9068.3	499.87 µg/L	499.87 ppb	11:23:25
3	Cr 267.716†	21370.3	21323.5	494.90 µg/L	494.90 ppb	11:23:25
3	Cu 324.752†	70292.7	66198.1	498.46 µg/L	498.46 ppb	11:23:25
3	Mn 257.610†	133527.7	132907.4	491.47 µg/L	491.47 ppb	11:23:25
3	Mo 202.031†	3757.5	3717.5	467.13 µg/L	467.13 ppb	11:23:46
3	Ni 231.604†	8340.7	7954.7	500.66 µg/L	500.66 ppb	11:23:25
3	P 214.914†	1221.6	1011.7	2373.8 µg/L	2373.8 ppb	11:23:46
3	Pb 220.353†	1759.3	1692.7	493.73 µg/L	493.73 ppb	11:23:46
3	S 181.975 Axial†	196.7	170.0	974.33 µg/L	974.33 ppb	11:23:46
3	Sb 206.836†	462.1	436.9	485.30 µg/L	485.30 ppb	11:23:46
3	Se 196.026†	329.9	315.5	517.56 µg/L	517.56 ppb	11:23:46
3	SiO2†	28211.5	25761.7	5437.6 µg/L	5437.6 ppb	11:23:25
3	Si 251.611†	30839.3	30347.8	2545.5 µg/L	2545.5 ppb	11:23:25
3	Sn 189.927†	839.1	810.6	475.75 µg/L	475.75 ppb	11:23:46
3	Ti 334.940†	204922.9	202906.4	505.71 µg/L	505.71 ppb	11:23:19
3	Tl 190.801†	269.7	291.1	505.77 µg/L	505.77 ppb	11:23:46
3	U 409.014†	4935.6	5138.6	489.33 µg/L	489.33 ppb	11:23:25
3	V 292.402†	40207.9	40086.2	503.99 µg/L	503.99 ppb	11:23:25
3	Zn 213.857†	17963.9	17183.7	497.40 µg/L	497.40 ppb	11:23:25

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1949991.9	100.34	%	0.470				0.47%
Sc RADIAL	77861.0	101	%	0.3				0.25%
Y 371.029	1228275.3	99.957	%	0.4697				0.47%
Ag 328.068†	55740.6	523.35	µg/L	10.230	523.35	ppb	10.230	1.95%
QC value within limits for Ag 328.068 Recovery = 104.67%								
Al 396.153Radial†	7449.7	5166.0	µg/L	16.20	5166.0	ppb	16.20	0.31%
QC value within limits for Al 396.153Radial Recovery = 103.32%								
As 188.979†	227.1	523.07	µg/L	33.865	523.07	ppb	33.865	6.47%
QC value within limits for As 188.979 Recovery = 104.61%								
B 249.677†	10539.3	510.83	µg/L	12.674	510.83	ppb	12.674	2.48%
QC value within limits for B 249.677 Recovery = 102.17%								
Ba 233.527†	17938.8	522.12	µg/L	17.206	522.12	ppb	17.206	3.30%
QC value within limits for Ba 233.527 Recovery = 104.42%								
Be 313.107†	739383.4	514.94	µg/L	6.119	514.94	ppb	6.119	1.19%
QC value within limits for Be 313.107 Recovery = 102.99%								
Ca 317.933Radial†	6591.7	5190.4	µg/L	20.10	5190.4	ppb	20.10	0.39%
QC value within limits for Ca 317.933Radial Recovery = 103.81%								
Cd 226.502†	17699.9	520.96	µg/L	17.236	520.96	ppb	17.236	3.31%
QC value within limits for Cd 226.502 Recovery = 104.19%								
Co 228.616†	9452.6	521.10	µg/L	18.418	521.10	ppb	18.418	3.53%

QC value within limits for Co 228.616 Recovery = 104.22%

Cr 267.716†	22434.7	520.69 µg/L	22.346	520.69 ppb	22.346	4.29%
QC value within limits for Cr 267.716 Recovery = 104.14%						
Cu 324.752†	68749.5	517.65 µg/L	16.644	517.65 ppb	16.644	3.22%
QC value within limits for Cu 324.752 Recovery = 103.53%						
Fe 238.204 Radial†	365.2	5253.7 µg/L	36.80	5253.7 ppb	36.80	0.70%
QC value within limits for Fe 238.204 Radial Recovery = 105.07%						
K 766.490 Radial†	7704.4	5114.5 µg/L	23.15	5114.5 ppb	23.15	0.45%
QC value within limits for K 766.490 Radial Recovery = 102.29%						
Mg 279.077 IEC†	483.1	5268.0 µg/L	25.56	5268.0 ppb	25.56	0.49%
QC value within limits for Mg 279.077 IEC Recovery = 105.36%						
Mn 257.610†	138539.2	512.28 µg/L	18.056	512.28 ppb	18.056	3.52%
QC value within limits for Mn 257.610 Recovery = 102.46%						
Mo 202.031†	4046.8	508.48 µg/L	35.879	508.48 ppb	35.879	7.06%
QC value within limits for Mo 202.031 Recovery = 101.70%						
Na 589.592 Radial†	35301.4	10137 µg/L	19.5	10137 ppb	19.5	0.19%
QC value within limits for Na 589.592 Radial Recovery = 101.37%						
Ni 231.604†	8293.2	521.96 µg/L	18.539	521.96 ppb	18.539	3.55%
QC value within limits for Ni 231.604 Recovery = 104.39%						
P 214.914†	1091.5	2563.7 µg/L	166.34	2563.7 ppb	166.34	6.49%
QC value within limits for P 214.914 Recovery = 102.55%						
Pb 220.353†	1795.2	523.65 µg/L	25.982	523.65 ppb	25.982	4.96%
QC value within limits for Pb 220.353 Recovery = 104.73%						
S 181.975 Axial†	177.2	1015.8 µg/L	35.90	1015.8 ppb	35.90	3.53%
QC value within limits for S 181.975 Axial Recovery = 101.58%						
Sb 206.836†	470.7	523.14 µg/L	33.033	523.14 ppb	33.033	6.31%
QC value within limits for Sb 206.836 Recovery = 104.63%						
Se 196.026†	326.5	535.09 µg/L	15.215	535.09 ppb	15.215	2.84%
QC value within limits for Se 196.026 Recovery = 107.02%						
SiO2†	26624.5	5619.7 µg/L	158.08	5619.7 ppb	158.08	2.81%
QC value within limits for SiO2 Recovery = 105.09%						
Si 251.611†	31322.8	2627.3 µg/L	71.11	2627.3 ppb	71.11	2.71%
QC value within limits for Si 251.611 Recovery = 105.09%						
Sn 189.927†	890.9	522.64 µg/L	40.967	522.64 ppb	40.967	7.84%
QC value within limits for Sn 189.927 Recovery = 104.53%						
Sr 421.552†	79943.4	507.95 µg/L	1.361	507.95 ppb	1.361	0.27%
QC value within limits for Sr 421.552 Recovery = 101.59%						
Ti 334.940†	206173.7	513.86 µg/L	7.061	513.86 ppb	7.061	1.37%
QC value within limits for Ti 334.940 Recovery = 102.77%						
Tl 190.801†	303.2	526.71 µg/L	18.302	526.71 ppb	18.302	3.47%
QC value within limits for Tl 190.801 Recovery = 105.34%						
U 409.014†	5402.3	514.48 µg/L	21.855	514.48 ppb	21.855	4.25%
QC value within limits for U 409.014 Recovery = 102.90%						
V 292.402†	41842.7	526.24 µg/L	19.303	526.24 ppb	19.303	3.67%
QC value within limits for V 292.402 Recovery = 105.25%						
Zn 213.857†	17890.5	517.88 µg/L	17.749	517.88 ppb	17.749	3.43%
QC value within limits for Zn 213.857 Recovery = 103.58%						

All analyte(s) passed QC.

Sequence No.: 32
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 11:23:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75986.5	75986.5	98.9	%			11:24:28
1	Al 396.153Radial†	-7.2	20.7	14.354	µg/L	14.354	ppb	11:24:28
1	Ca 317.933Radial†	242.5	-6.5	-5.0847	µg/L	-5.0847	ppb	11:24:48
1	Fe 238.204 Radial†	17.4	1.7	25.053	µg/L	25.053	ppb	11:24:48
1	K 766.490 Radial†	436.8	29.6	19.670	µg/L	19.670	ppb	11:24:28
1	Mg 279.077 IEC†	6.6	-1.7	-18.346	µg/L	-18.346	ppb	11:24:48
1	Na 589.592 Radial†	358.8	-182.2	-52.327	µg/L	-52.327	ppb	11:24:28
1	Sr 421.552†	583.7	32.4	0.2061	µg/L	0.2061	ppb	11:24:28
1	Sc 361.383	1932054.2	1932054.2	99.417	%			11:25:50
1	Y 371.029	1221823.4	1221823.4	99.432	%			11:25:50
1	Ag 328.068†	-77.5	-22.8	-0.2084	µg/L	-0.2084	ppb	11:25:55
1	As 188.979†	-0.9	-1.4	-3.2589	µg/L	-3.2589	ppb	11:26:16
1	B 249.677†	108.9	-5.7	-0.2900	µg/L	-0.2900	ppb	11:26:16
1	Ba 233.527†	-14.7	-0.3	-0.0067	µg/L	-0.0067	ppb	11:26:16
1	Be 313.107†	3920.6	104.2	0.0724	µg/L	0.0724	ppb	11:25:55
1	Cd 226.502†	-128.4	6.3	0.1837	µg/L	0.1837	ppb	11:26:16
1	Co 228.616†	-38.1	6.7	0.3688	µg/L	0.3688	ppb	11:26:16
1	Cr 267.716†	-100.9	-18.7	-0.4342	µg/L	-0.4342	ppb	11:25:55
1	Cu 324.752†	3719.5	73.1	0.5531	µg/L	0.5531	ppb	11:25:55
1	Mn 257.610†	-133.1	55.6	0.2093	µg/L	0.2093	ppb	11:26:16
1	Mo 202.031†	21.6	4.6	0.5730	µg/L	0.5730	ppb	11:26:16
1	Ni 231.604†	336.1	2.6	0.1665	µg/L	0.1665	ppb	11:26:16
1	P 214.914†	208.3	7.0	16.797	µg/L	16.797	ppb	11:26:16
1	Pb 220.353†	66.3	10.7	3.1410	µg/L	3.1410	ppb	11:26:16
1	S 181.975 Axial†	25.3	-0.1	-0.4468	µg/L	-0.4468	ppb	11:26:16
1	Sb 206.836†	28.9	6.7	7.4141	µg/L	7.4141	ppb	11:26:16
1	Se 196.026†	4.0	-8.4	-13.108	µg/L	-13.108	ppb	11:26:16
1	SiO2†	2295.1	29.8	6.2973	µg/L	6.2973	ppb	11:25:55
1	Si 251.611†	354.1	51.7	4.3351	µg/L	4.3351	ppb	11:26:16
1	Sn 189.927†	25.9	2.6	1.5154	µg/L	1.5154	ppb	11:26:16
1	Ti 334.940†	947.6	179.6	0.4492	µg/L	0.4492	ppb	11:25:55
1	Tl 190.801†	-21.3	1.7	2.8635	µg/L	2.8635	ppb	11:26:16
1	U 409.014†	-291.9	-60.6	-5.7877	µg/L	-5.7877	ppb	11:25:55
1	V 292.402†	-88.0	33.6	0.4168	µg/L	0.4168	ppb	11:25:55
1	Zn 213.857†	672.7	5.4	0.1547	µg/L	0.1547	ppb	11:26:16
2	Sc RADIAL	75428.9	75428.9	98.2	%			11:24:54
2	Al 396.153Radial†	-21.2	6.3	4.3990	µg/L	4.3990	ppb	11:24:54
2	Ca 317.933Radial†	243.0	-4.2	-3.2897	µg/L	-3.2897	ppb	11:25:14
2	Fe 238.204 Radial†	20.3	4.8	68.931	µg/L	68.931	ppb	11:25:14
2	K 766.490 Radial†	422.6	18.4	12.220	µg/L	12.220	ppb	11:24:54
2	Mg 279.077 IEC†	10.1	2.0	21.188	µg/L	21.188	ppb	11:25:14
2	Na 589.592 Radial†	366.6	-171.6	-49.278	µg/L	-49.278	ppb	11:24:54
2	Sr 421.552†	577.4	30.4	0.1931	µg/L	0.1931	ppb	11:24:54
2	Sc 361.383	1937259.1	1937259.1	99.684	%			11:26:22
2	Y 371.029	1224917.4	1224917.4	99.684	%			11:26:22
2	Ag 328.068†	-7.3	47.7	0.4463	µg/L	0.4463	ppb	11:26:28
2	As 188.979†	-1.4	-1.9	-4.4941	µg/L	-4.4941	ppb	11:26:48
2	B 249.677†	121.4	6.6	0.2866	µg/L	0.2866	ppb	11:26:48
2	Ba 233.527†	-17.8	-3.4	-0.0988	µg/L	-0.0988	ppb	11:26:48
2	Be 313.107†	3970.8	144.0	0.1002	µg/L	0.1002	ppb	11:26:28
2	Cd 226.502†	-126.2	8.9	0.2534	µg/L	0.2534	ppb	11:26:48
2	Co 228.616†	-45.7	-0.8	-0.0444	µg/L	-0.0444	ppb	11:26:48
2	Cr 267.716†	-60.7	21.9	0.5083	µg/L	0.5083	ppb	11:26:28
2	Cu 324.752†	3676.6	20.1	0.1606	µg/L	0.1606	ppb	11:26:28
2	Mn 257.610†	-140.5	48.6	0.1878	µg/L	0.1878	ppb	11:26:48
2	Mo 202.031†	19.6	2.5	0.3147	µg/L	0.3147	ppb	11:26:48
2	Ni 231.604†	340.6	6.3	0.3984	µg/L	0.3984	ppb	11:26:48
2	P 214.914†	210.2	8.3	19.919	µg/L	19.919	ppb	11:26:48
2	Pb 220.353†	63.5	7.7	2.2612	µg/L	2.2612	ppb	11:26:48

2	S 181.975 Axial†	21.6	-3.8	-22.011 µg/L	-22.011 ppb	11:26:48
2	Sb 206.836†	26.2	3.9	4.2698 µg/L	4.2698 ppb	11:26:48
2	Se 196.026†	6.0	-6.4	-9.8431 µg/L	-9.8431 ppb	11:26:48
2	SiO2†	2281.8	10.3	2.1648 µg/L	2.1648 ppb	11:26:28
2	Si 251.611†	349.0	45.6	3.8252 µg/L	3.8252 ppb	11:26:48
2	Sn 189.927†	25.7	2.4	1.4156 µg/L	1.4156 ppb	11:26:48
2	Ti 334.940†	844.5	73.5	0.1816 µg/L	0.1816 ppb	11:26:28
2	Tl 190.801†	-17.8	5.2	8.9349 µg/L	8.9349 ppb	11:26:48
2	U 409.014†	-295.4	-63.4	-6.0562 µg/L	-6.0562 ppb	11:26:28
2	V 292.402†	-157.3	-35.6	-0.4419 µg/L	-0.4419 ppb	11:26:28
2	Zn 213.857†	683.5	14.3	0.4110 µg/L	0.4110 ppb	11:26:48
3	Sc RADIAL	75712.9	75712.9	98.6 %		11:25:19
3	Al 396.153Radial†	17.2	45.5	31.581 µg/L	31.581 ppb	11:25:19
3	Ca 317.933Radial†	251.2	3.2	2.4930 µg/L	2.4930 ppb	11:25:40
3	Fe 238.204 Radial†	19.6	4.0	57.137 µg/L	57.137 ppb	11:25:40
3	K 766.490 Radial†	413.2	7.2	4.8011 µg/L	4.8011 ppb	11:25:19
3	Mg 279.077 IEC†	7.2	-1.0	-11.013 µg/L	-11.013 ppb	11:25:40
3	Na 589.592 Radial†	362.1	-177.5	-50.984 µg/L	-50.984 ppb	11:25:19
3	Sr 421.552†	579.1	29.9	0.1897 µg/L	0.1897 ppb	11:25:19
3	Sc 361.383	1931643.4	1931643.4	99.395 %		11:26:54
3	Y 371.029	1220693.5	1220693.5	99.340 %		11:26:54
3	Ag 328.068†	-36.3	18.5	0.1764 µg/L	0.1764 ppb	11:27:00
3	As 188.979†	-2.4	-3.0	-6.8626 µg/L	-6.8626 ppb	11:27:20
3	B 249.677†	116.1	1.6	0.0456 µg/L	0.0456 ppb	11:27:20
3	Ba 233.527†	-14.5	-0.0	-0.0006 µg/L	-0.0006 ppb	11:27:20
3	Be 313.107†	3961.7	146.4	0.1019 µg/L	0.1019 ppb	11:27:00
3	Cd 226.502†	-128.8	5.9	0.1679 µg/L	0.1679 ppb	11:27:20
3	Co 228.616†	-48.5	-3.8	-0.2086 µg/L	-0.2086 ppb	11:27:20
3	Cr 267.716†	-89.1	-6.9	-0.1599 µg/L	-0.1599 ppb	11:27:00
3	Cu 324.752†	3651.3	5.3	0.0478 µg/L	0.0478 ppb	11:27:00
3	Mn 257.610†	-139.0	49.6	0.1915 µg/L	0.1915 ppb	11:27:20
3	Mo 202.031†	17.2	0.1	0.0122 µg/L	0.0122 ppb	11:27:20
3	Ni 231.604†	339.7	6.3	0.4009 µg/L	0.4009 ppb	11:27:20
3	P 214.914†	205.6	4.4	10.510 µg/L	10.510 ppb	11:27:20
3	Pb 220.353†	60.2	4.7	1.3569 µg/L	1.3569 ppb	11:27:20
3	S 181.975 Axial†	21.4	-4.0	-23.053 µg/L	-23.053 ppb	11:27:20
3	Sb 206.836†	23.0	0.8	0.8359 µg/L	0.8359 ppb	11:27:20
3	Se 196.026†	11.0	-1.3	-1.8582 µg/L	-1.8582 ppb	11:27:20
3	SiO2†	2272.6	7.6	1.6063 µg/L	1.6063 ppb	11:27:00
3	Si 251.611†	343.0	40.6	3.4020 µg/L	3.4020 ppb	11:27:20
3	Sn 189.927†	24.3	1.0	0.5781 µg/L	0.5781 ppb	11:27:20
3	Ti 334.940†	831.7	63.1	0.1582 µg/L	0.1582 ppb	11:27:00
3	Tl 190.801†	-24.2	-1.3	-2.2750 µg/L	-2.2750 ppb	11:27:20
3	U 409.014†	-226.0	5.6	0.5278 µg/L	0.5278 ppb	11:27:00
3	V 292.402†	-121.3	0.0	0.0039 µg/L	0.0039 ppb	11:27:00
3	Zn 213.857†	675.5	8.3	0.2382 µg/L	0.2382 ppb	11:27:20

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1933652.2	99.499	%	0.1611				0.16%
Sc RADIAL	75709.4	98.6	%	0.36				0.37%
Y 371.029	1222478.1	99.486	%	0.1780				0.18%
Ag 328.068†	14.5	0.1381	µg/L	0.32905	0.1381	ppb	0.32905	238.26%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	24.2	16.778	µg/L	13.7521	16.778	ppb	13.7521	81.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.1	-4.8719	µg/L	1.83130	-4.8719	ppb	1.83130	37.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	0.8	0.0140	µg/L	0.28961	0.0140	ppb	0.28961	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.2	-0.0354	µg/L	0.05500	-0.0354	ppb	0.05500	155.57%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	131.5	0.0915	µg/L	0.01657	0.0915	ppb	0.01657	18.10%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.5	-1.9605	µg/L	3.95985	-1.9605	ppb	3.95985	201.98%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.0	0.2017	µg/L	0.04547	0.2017	ppb	0.04547	22.55%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.7	0.0386	µg/L	0.29750	0.0386	ppb	0.29750	771.12%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -1.2     -0.0286 µg/L      0.48476     -0.0286 ppb       0.48476 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              32.8      0.2538 µg/L      0.26522      0.2538 ppb       0.26522 104.49%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        3.5      50.374 µg/L      22.7075      50.374 ppb       22.7075  45.08%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        18.4      12.230 µg/L       7.4343      12.230 ppb        7.4343  60.79%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.2      -2.7237 µg/L     21.03019     -2.7237 ppb      21.03019 772.13%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              51.3      0.1962 µg/L      0.01153      0.1962 ppb       0.01153   5.88%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.4      0.3000 µg/L      0.28072      0.3000 ppb       0.28072  93.59%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -177.1     -50.863 µg/L       1.5276     -50.863 ppb        1.5276   3.00%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               5.1      0.3219 µg/L      0.13461      0.3219 ppb       0.13461  41.82%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                6.6      15.742 µg/L       4.7925      15.742 ppb        4.7925  30.44%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.7      2.2531 µg/L      0.89207      2.2531 ppb       0.89207  39.59%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.6     -15.170 µg/L      12.7615     -15.170 ppb       12.7615  84.12%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               3.8      4.1733 µg/L      3.29017      4.1733 ppb       3.29017  78.84%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -5.4      -8.2697 µg/L     5.78756     -8.2697 ppb       5.78756  69.98%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    15.9      3.3561 µg/L      2.56244      3.3561 ppb       2.56244  76.35%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              45.9      3.8541 µg/L      0.46722      3.8541 ppb       0.46722  12.12%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.0      1.1697 µg/L      0.51477      1.1697 ppb       0.51477  44.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              30.9      0.1963 µg/L      0.00868      0.1963 ppb       0.00868   4.42%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             105.4      0.2630 µg/L      0.16168      0.2630 ppb       0.16168  61.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.8      3.1744 µg/L      5.61143      3.1744 ppb       5.61143 176.77%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -39.5     -3.7720 µg/L      3.72616     -3.7720 ppb       3.72616  98.78%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -0.6     -0.0071 µg/L      0.42944     -0.0071 ppb       0.42944 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               9.3      0.2680 µg/L      0.13075      0.2680 ppb       0.13075  48.80%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 33
Sample ID: 1202011893|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 327
Date Collected: 1/27/2010 11:27:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011893|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75048.6	75048.6	97.7	%			11:28:06
1	Al 396.153Radial†	-51.9	-25.2	-17.513	µg/L	-17.513	ppb	11:28:06
1	Ca 317.933Radial†	268.7	23.3	18.379	µg/L	18.379	ppb	11:28:26
1	Fe 238.204 Radial†	21.5	6.2	88.390	µg/L	88.390	ppb	11:28:26
1	K 766.490 Radial†	348.5	-55.2	-36.675	µg/L	-36.675	ppb	11:28:06
1	Mg 279.077 IEC†	6.6	-1.6	-17.446	µg/L	-17.446	ppb	11:28:26
1	Na 589.592 Radial†	464.7	-69.3	-19.894	µg/L	-19.894	ppb	11:28:06
1	Sr 421.552†	608.7	65.4	0.4154	µg/L	0.4154	ppb	11:28:06
1	Sc 361.383	1937082.8	1937082.8	99.675	%			11:29:28
1	Y 371.029	1221970.3	1221970.3	99.444	%			11:29:28
1	Ag 328.068†	-56.0	-1.1	-0.0064	µg/L	-0.0064	ppb	11:29:34
1	As 188.979†	-3.9	-4.5	-10.389	µg/L	-10.389	ppb	11:29:55
1	B 249.677†	140.6	25.8	1.2101	µg/L	1.2101	ppb	11:29:55
1	Ba 233.527†	166.4	181.4	5.2707	µg/L	5.2707	ppb	11:29:55
1	Be 313.107†	3931.6	104.9	0.0729	µg/L	0.0729	ppb	11:29:34
1	Cd 226.502†	-129.0	6.0	0.1675	µg/L	0.1675	ppb	11:29:55
1	Co 228.616†	-40.9	4.0	0.2193	µg/L	0.2193	ppb	11:29:55
1	Cr 267.716†	-73.2	9.4	0.2167	µg/L	0.2167	ppb	11:29:34
1	Cu 324.752†	3743.6	87.6	0.6711	µg/L	0.6711	ppb	11:29:34
1	Mn 257.610†	31.9	221.5	0.8308	µg/L	0.8308	ppb	11:29:55
1	Mo 202.031†	15.2	-2.0	-0.2442	µg/L	-0.2442	ppb	11:29:55
1	Ni 231.604†	324.6	-9.7	-0.6125	µg/L	-0.6125	ppb	11:29:55
1	P 214.914†	207.6	5.8	13.625	µg/L	13.625	ppb	11:29:55
1	Pb 220.353†	59.6	3.9	1.1250	µg/L	1.1250	ppb	11:29:55
1	S 181.975 Axial†	24.3	-1.1	-6.3179	µg/L	-6.3179	ppb	11:29:55
1	Sb 206.836†	28.6	6.2	6.9085	µg/L	6.9085	ppb	11:29:55
1	Se 196.026†	19.2	6.8	11.150	µg/L	11.150	ppb	11:29:55
1	SiO2†	2367.1	96.0	20.262	µg/L	20.262	ppb	11:29:34
1	Si 251.611†	467.2	164.2	13.771	µg/L	13.771	ppb	11:29:55
1	Sn 189.927†	22.5	-0.8	-0.4651	µg/L	-0.4651	ppb	11:29:55
1	Ti 334.940†	974.6	204.1	0.5107	µg/L	0.5107	ppb	11:29:34
1	Tl 190.801†	-19.1	3.9	6.7563	µg/L	6.7563	ppb	11:29:55
1	U 409.014†	-212.3	19.9	1.8895	µg/L	1.8895	ppb	11:29:34
1	V 292.402†	-142.0	-20.4	-0.2480	µg/L	-0.2480	ppb	11:29:34
1	Zn 213.857†	708.1	39.1	1.1394	µg/L	1.1394	ppb	11:29:55
2	Sc RADIAL	75129.0	75129.0	97.8	%			11:28:32
2	Al 396.153Radial†	-42.7	-15.7	-10.931	µg/L	-10.931	ppb	11:28:32
2	Ca 317.933Radial†	263.1	17.3	13.656	µg/L	13.656	ppb	11:28:52
2	Fe 238.204 Radial†	20.4	5.0	71.863	µg/L	71.863	ppb	11:28:52
2	K 766.490 Radial†	452.7	50.9	33.772	µg/L	33.772	ppb	11:28:32
2	Mg 279.077 IEC†	9.0	0.9	9.7335	µg/L	9.7335	ppb	11:28:52
2	Na 589.592 Radial†	468.1	-66.2	-19.024	µg/L	-19.024	ppb	11:28:32
2	Sr 421.552†	586.0	41.5	0.2639	µg/L	0.2639	ppb	11:28:32
2	Sc 361.383	1931214.4	1931214.4	99.373	%			11:30:01
2	Y 371.029	1218744.3	1218744.3	99.182	%			11:30:01
2	Ag 328.068†	-88.3	-33.8	-0.3087	µg/L	-0.3087	ppb	11:30:06
2	As 188.979†	0.4	-0.2	-0.4041	µg/L	-0.4041	ppb	11:30:27
2	B 249.677†	142.7	28.4	1.3448	µg/L	1.3448	ppb	11:30:27
2	Ba 233.527†	169.0	184.6	5.3633	µg/L	5.3633	ppb	11:30:27
2	Be 313.107†	3873.1	58.1	0.0403	µg/L	0.0403	ppb	11:30:06
2	Cd 226.502†	-125.2	9.5	0.2707	µg/L	0.2707	ppb	11:30:27
2	Co 228.616†	-45.5	-0.8	-0.0450	µg/L	-0.0450	ppb	11:30:27
2	Cr 267.716†	-51.8	30.7	0.7112	µg/L	0.7112	ppb	11:30:06
2	Cu 324.752†	3708.5	63.6	0.4885	µg/L	0.4885	ppb	11:30:06
2	Mn 257.610†	10.0	199.5	0.7462	µg/L	0.7462	ppb	11:30:27
2	Mo 202.031†	17.6	0.5	0.0678	µg/L	0.0678	ppb	11:30:27
2	Ni 231.604†	336.8	3.5	0.2189	µg/L	0.2189	ppb	11:30:27
2	P 214.914†	208.7	7.5	17.838	µg/L	17.838	ppb	11:30:27
2	Pb 220.353†	63.2	7.7	2.2446	µg/L	2.2446	ppb	11:30:27

2	S 181.975 Axial†	25.5	0.2	0.8898 µg/L	0.8898 ppb	11:30:27
2	Sb 206.836†	28.3	6.0	6.6723 µg/L	6.6723 ppb	11:30:27
2	Se 196.026†	7.3	-5.1	-7.8054 µg/L	-7.8054 ppb	11:30:27
2	SiO2†	2373.9	110.1	23.241 µg/L	23.241 ppb	11:30:06
2	Si 251.611†	454.8	153.2	12.847 µg/L	12.847 ppb	11:30:27
2	Sn 189.927†	21.8	-1.5	-0.8559 µg/L	-0.8559 ppb	11:30:27
2	Ti 334.940†	919.2	151.4	0.3770 µg/L	0.3770 ppb	11:30:06
2	Tl 190.801†	-20.7	2.2	3.8369 µg/L	3.8369 ppb	11:30:27
2	U 409.014†	-226.2	5.3	0.4994 µg/L	0.4994 ppb	11:30:06
2	V 292.402†	-102.3	19.2	0.2448 µg/L	0.2448 ppb	11:30:06
2	Zn 213.857†	695.3	28.4	0.8220 µg/L	0.8220 ppb	11:30:27
3	Sc RADIAL	75461.1	75461.1	98.2 %		11:28:58
3	Al 396.153Radial†	-24.7	2.8	1.9650 µg/L	1.9650 ppb	11:28:58
3	Ca 317.933Radial†	263.5	16.6	13.042 µg/L	13.042 ppb	11:29:18
3	Fe 238.204 Radial†	21.7	6.2	89.291 µg/L	89.291 ppb	11:29:18
3	K 766.490 Radial†	371.5	-33.8	-22.440 µg/L	-22.440 ppb	11:28:58
3	Mg 279.077 IEC†	8.2	0.0	0.3263 µg/L	0.3263 ppb	11:29:18
3	Na 589.592 Radial†	443.5	-93.5	-26.843 µg/L	-26.843 ppb	11:28:58
3	Sr 421.552†	590.8	43.7	0.2777 µg/L	0.2777 ppb	11:28:58
3	Sc 361.383	1930069.9	1930069.9	99.314 %		11:30:33
3	Y 371.029	1218052.6	1218052.6	99.125 %		11:30:33
3	Ag 328.068†	-73.8	-19.2	-0.1726 µg/L	-0.1726 ppb	11:30:38
3	As 188.979†	-0.9	-1.5	-3.4065 µg/L	-3.4065 ppb	11:30:59
3	B 249.677†	126.5	12.1	0.5441 µg/L	0.5441 ppb	11:30:59
3	Ba 233.527†	161.0	176.6	5.1317 µg/L	5.1317 ppb	11:30:59
3	Be 313.107†	3924.2	111.8	0.0777 µg/L	0.0777 ppb	11:30:38
3	Cd 226.502†	-123.1	11.5	0.3287 µg/L	0.3287 ppb	11:30:59
3	Co 228.616†	-35.6	9.1	0.5034 µg/L	0.5034 ppb	11:30:59
3	Cr 267.716†	-72.1	10.2	0.2376 µg/L	0.2376 ppb	11:30:38
3	Cu 324.752†	3736.6	94.2	0.7209 µg/L	0.7209 ppb	11:30:38
3	Mn 257.610†	-3.4	186.1	0.6994 µg/L	0.6994 ppb	11:30:59
3	Mo 202.031†	15.1	-2.0	-0.2437 µg/L	-0.2437 ppb	11:30:59
3	Ni 231.604†	342.3	9.2	0.5806 µg/L	0.5806 ppb	11:30:59
3	P 214.914†	205.1	4.0	9.3923 µg/L	9.3923 ppb	11:30:59
3	Pb 220.353†	54.6	-1.0	-0.2744 µg/L	-0.2744 ppb	11:30:59
3	S 181.975 Axial†	24.9	-0.4	-2.4873 µg/L	-2.4873 ppb	11:30:59
3	Sb 206.836†	27.0	4.8	5.3376 µg/L	5.3376 ppb	11:30:59
3	Se 196.026†	14.6	2.2	3.8610 µg/L	3.8610 ppb	11:30:59
3	SiO2†	2350.6	88.1	18.589 µg/L	18.589 ppb	11:30:38
3	Si 251.611†	447.0	145.6	12.214 µg/L	12.214 ppb	11:30:59
3	Sn 189.927†	22.9	-0.4	-0.2109 µg/L	-0.2109 ppb	11:30:59
3	Ti 334.940†	999.6	232.8	0.5808 µg/L	0.5808 ppb	11:30:38
3	Tl 190.801†	-20.8	2.2	3.7462 µg/L	3.7462 ppb	11:30:59
3	U 409.014†	-320.8	-90.0	-8.6049 µg/L	-8.6049 ppb	11:30:38
3	V 292.402†	-112.2	9.1	0.1082 µg/L	0.1082 ppb	11:30:38
3	Zn 213.857†	696.9	30.4	0.8770 µg/L	0.8770 ppb	11:30:59

Mean Data: 1202011893|940174|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1932789.0	99.454	%	0.1936				0.19%
Sc RADIAL	75212.9	97.9	%	0.28				0.29%
Y 371.029	1219589.1	99.250	%	0.1702				0.17%
Ag 328.068†	-18.0	-0.1626	µg/L	0.15140	-0.1626	ppb	0.15140	93.12%
Al 396.153Radial†	-12.7	-8.8261	µg/L	9.90790	-8.8261	ppb	9.90790	112.26%
As 188.979†	-2.1	-4.7333	µg/L	5.12323	-4.7333	ppb	5.12323	108.24%
B 249.677†	22.1	1.0330	µg/L	0.42874	1.0330	ppb	0.42874	41.50%
Ba 233.527†	180.9	5.2552	µg/L	0.11658	5.2552	ppb	0.11658	2.22%
Be 313.107†	91.6	0.0637	µg/L	0.02032	0.0637	ppb	0.02032	31.93%
Ca 317.933Radial†	19.1	15.026	µg/L	2.9199	15.026	ppb	2.9199	19.43%
Cd 226.502†	9.0	0.2556	µg/L	0.08168	0.2556	ppb	0.08168	31.95%
Co 228.616†	4.1	0.2259	µg/L	0.27422	0.2259	ppb	0.27422	121.38%
Cr 267.716†	16.7	0.3885	µg/L	0.27965	0.3885	ppb	0.27965	71.98%
Cu 324.752†	81.8	0.6268	µg/L	0.12236	0.6268	ppb	0.12236	19.52%
Fe 238.204 Radial†	5.8	83.181	µg/L	9.8120	83.181	ppb	9.8120	11.80%
K 766.490 Radial†	-12.7	-8.4478	µg/L	37.24950	-8.4478	ppb	37.24950	440.94%
Mg 279.077 IEC†	-0.2	-2.4620	µg/L	13.80251	-2.4620	ppb	13.80251	560.62%
Mn 257.610†	202.4	0.7588	µg/L	0.06663	0.7588	ppb	0.06663	8.78%
Mo 202.031†	-1.1	-0.1400	µg/L	0.18000	-0.1400	ppb	0.18000	128.54%
Na 589.592 Radial†	-76.3	-21.920	µg/L	4.2857	-21.920	ppb	4.2857	19.55%

Ni 231.604†	1.0	0.0623	µg/L	0.61177	0.0623	ppb	0.61177 981.22%
P 214.914†	5.7	13.618	µg/L	4.2228	13.618	ppb	4.2228 31.01%
Pb 220.353†	3.5	1.0317	µg/L	1.26210	1.0317	ppb	1.26210 122.33%
S 181.975 Axial†	-0.5	-2.6385	µg/L	3.60622	-2.6385	ppb	3.60622 136.68%
Sb 206.836†	5.7	6.3061	µg/L	0.84702	6.3061	ppb	0.84702 13.43%
Se 196.026†	1.3	2.4018	µg/L	9.56157	2.4018	ppb	9.56157 398.09%
SiO2†	98.1	20.697	µg/L	2.3561	20.697	ppb	2.3561 11.38%
Si 251.611†	154.3	12.944	µg/L	0.7830	12.944	ppb	0.7830 6.05%
Sn 189.927†	-0.9	-0.5106	µg/L	0.32489	-0.5106	ppb	0.32489 63.63%
Sr 421.552†	50.2	0.3190	µg/L	0.08375	0.3190	ppb	0.08375 26.25%
Ti 334.940†	196.1	0.4895	µg/L	0.10358	0.4895	ppb	0.10358 21.16%
Tl 190.801†	2.8	4.7798	µg/L	1.71230	4.7798	ppb	1.71230 35.82%
U 409.014†	-21.6	-2.0720	µg/L	5.70019	-2.0720	ppb	5.70019 275.11%
V 292.402†	2.6	0.0350	µg/L	0.25445	0.0350	ppb	0.25445 727.12%
Zn 213.857†	32.6	0.9461	µg/L	0.16961	0.9461	ppb	0.16961 17.93%

Sequence No.: 34
Sample ID: 1202011894|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 328
Date Collected: 1/27/2010 11:31:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011894|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77851.8	77851.8	101	%			11:31:47
1	Al 396.153Radial†	148314.0	146375.6	101700	µg/L	101700	ppb	11:31:42
1	Ca 317.933Radial†	137912.1	135832.0	106960	µg/L	106960	ppb	11:31:42
1	Fe 238.204 Radial†	15540.9	15319.0	219950	µg/L	219950	ppb	11:31:47
1	K 766.490 Radial†	69112.1	67783.9	44997	µg/L	44997	ppb	11:31:42
1	Mg 279.077 IEC†	4007.8	3946.4	42783	µg/L	42783	ppb	11:31:47
1	Na 589.592 Radial†	38151.9	37101.2	10654	µg/L	10654	ppb	11:31:42
1	Sr 421.552†	385461.9	379793.8	2413.2	µg/L	2413.2	ppb	11:31:42
1	Sc 361.383	1963754.3	1963754.3	101.05	%			11:32:24
1	Y 371.029	1261170.8	1261170.8	102.63	%			11:32:24
1	Ag 328.068†	33237.8	32948.3	329.82	µg/L	329.82	ppb	11:32:30
1	As 188.979†	508.1	502.3	1165.2	µg/L	1165.2	ppb	11:32:50
1	B 249.677†	34799.9	34323.9	1559.1	µg/L	1559.1	ppb	11:32:30
1	Ba 233.527†	73469.8	72722.6	2115.2	µg/L	2115.2	ppb	11:32:30
1	Be 313.107†	1226384.1	1209829.4	840.44	µg/L	840.44	ppb	11:32:24
1	Cd 226.502†	22477.7	22380.1	635.38	µg/L	635.38	ppb	11:32:30
1	Co 228.616†	18166.1	18022.7	981.73	µg/L	981.73	ppb	11:32:30
1	Cr 267.716†	110128.6	109069.6	2530.6	µg/L	2530.6	ppb	11:32:30
1	Cu 324.752†	263026.1	256630.8	1960.1	µg/L	1960.1	ppb	11:32:30
1	Mn 257.610†	1598823.5	1582436.2	5873.4	µg/L	5873.4	ppb	11:32:24
1	Mo 202.031†	4277.7	4216.1	537.91	µg/L	537.91	ppb	11:32:50
1	Ni 231.604†	23339.7	22762.3	1435.8	µg/L	1435.8	ppb	11:32:30
1	P 214.914†	4313.6	4066.4	9398.9	µg/L	9398.9	ppb	11:32:50
1	Pb 220.353†	3323.8	3233.4	938.54	µg/L	938.54	ppb	11:32:50
1	S 181.975 Axial†	770.2	736.7	4223.1	µg/L	4223.1	ppb	11:32:50
1	Sb 206.836†	1212.2	1177.2	1276.0	µg/L	1276.0	ppb	11:32:50
1	Se 196.026†	1555.1	1526.6	3262.5	µg/L	3262.5	ppb	11:32:50
1	SiO2†	428867.2	422141.8	89103	µg/L	89103	ppb	11:32:24
1	Si 251.611†	496339.5	490888.9	41174	µg/L	41174	ppb	11:32:24
1	Sn 189.927†	1929.4	1885.9	1152.7	µg/L	1152.7	ppb	11:32:50
1	Ti 334.940†	2617016.1	2589108.9	6455.5	µg/L	6455.5	ppb	11:32:24
1	Tl 190.801†	756.8	772.0	1379.8	µg/L	1379.8	ppb	11:32:50
1	U 409.014†	-1250.3	-1004.4	-132.94	µg/L	-132.94	ppb	11:32:30
1	V 292.402†	108695.4	107690.6	1360.6	µg/L	1360.6	ppb	11:32:30
1	Zn 213.857†	216948.4	214027.7	6217.3	µg/L	6217.3	ppb	11:32:30
2	Sc RADIAL	77200.4	77200.4	100	%			11:31:59
2	Al 396.153Radial†	147806.0	147105.1	102200	µg/L	102200	ppb	11:31:53
2	Ca 317.933Radial†	136958.8	136031.8	107110	µg/L	107110	ppb	11:31:53
2	Fe 238.204 Radial†	15445.1	15353.1	220440	µg/L	220440	ppb	11:31:59
2	K 766.490 Radial†	68802.5	68051.2	45175	µg/L	45175	ppb	11:31:53
2	Mg 279.077 IEC†	3999.2	3971.2	43053	µg/L	43053	ppb	11:31:59
2	Na 589.592 Radial†	38089.3	37356.5	10727	µg/L	10727	ppb	11:31:53
2	Sr 421.552†	383580.3	381131.0	2421.7	µg/L	2421.7	ppb	11:31:53
2	Sc 361.383	1966520.5	1966520.5	101.19	%			11:32:58
2	Y 371.029	1263949.6	1263949.6	102.86	%			11:32:58
2	Ag 328.068†	33589.8	33249.9	332.72	µg/L	332.72	ppb	11:33:03
2	As 188.979†	512.5	505.9	1173.6	µg/L	1173.6	ppb	11:33:24
2	B 249.677†	35124.3	34596.0	1572.1	µg/L	1572.1	ppb	11:33:03
2	Ba 233.527†	74141.3	73283.9	2131.6	µg/L	2131.6	ppb	11:33:03
2	Be 313.107†	1231227.1	1212908.2	842.58	µg/L	842.58	ppb	11:32:58
2	Cd 226.502†	22621.1	22490.5	638.59	µg/L	638.59	ppb	11:33:03
2	Co 228.616†	18345.7	18174.9	990.08	µg/L	990.08	ppb	11:33:03
2	Cr 267.716†	111042.1	109819.0	2548.0	µg/L	2548.0	ppb	11:33:03
2	Cu 324.752†	265528.8	258737.9	1976.1	µg/L	1976.1	ppb	11:33:03
2	Mn 257.610†	1604889.7	1586205.3	5887.4	µg/L	5887.4	ppb	11:32:58
2	Mo 202.031†	4286.4	4218.8	538.26	µg/L	538.26	ppb	11:33:24
2	Ni 231.604†	23511.8	22899.9	1444.5	µg/L	1444.5	ppb	11:33:03
2	P 214.914†	4336.2	4082.7	9436.1	µg/L	9436.1	ppb	11:33:24
2	Pb 220.353†	3337.5	3242.3	941.12	µg/L	941.12	ppb	11:33:24

2	S 181.975 Axial†	770.7	736.1	4219.7	µg/L	4219.7 ppb	11:33:24
2	Sb 206.836†	1227.1	1190.2	1290.2	µg/L	1290.2 ppb	11:33:24
2	Se 196.026†	1558.0	1527.3	3265.4	µg/L	3265.4 ppb	11:33:24
2	SiO2†	430881.1	423535.0	89397	µg/L	89397 ppb	11:32:58
2	Si 251.611†	498501.5	492334.5	41295	µg/L	41295 ppb	11:32:58
2	Sn 189.927†	1943.4	1897.1	1159.3	µg/L	1159.3 ppb	11:33:24
2	Ti 334.940†	2629622.5	2597923.9	6477.5	µg/L	6477.5 ppb	11:32:58
2	Tl 190.801†	762.6	776.7	1388.1	µg/L	1388.1 ppb	11:33:24
2	U 409.014†	-1225.5	-978.1	-130.51	µg/L	-130.51 ppb	11:33:03
2	V 292.402†	109539.3	108373.2	1369.1	µg/L	1369.1 ppb	11:33:03
2	Zn 213.857†	218852.5	215607.4	6263.2	µg/L	6263.2 ppb	11:33:03
3	Sc RADIAL	78173.0	78173.0	102	%		11:32:10
3	Al 396.153Radial†	148120.9	145584.6	101150	µg/L	101150 ppb	11:32:05
3	Ca 317.933Radial†	137637.9	135003.5	106300	µg/L	106300 ppb	11:32:05
3	Fe 238.204 Radial†	15548.1	15263.0	219140	µg/L	219140 ppb	11:32:10
3	K 766.490 Radial†	68916.8	67311.7	44684	µg/L	44684 ppb	11:32:05
3	Mg 279.077 IEC†	4007.1	3929.4	42599	µg/L	42599 ppb	11:32:10
3	Na 589.592 Radial†	38224.4	37017.7	10630	µg/L	10630 ppb	11:32:05
3	Sr 421.552†	384947.6	377725.7	2400.0	µg/L	2400.0 ppb	11:32:05
3	Sc 361.383	1958473.4	1958473.4	100.78	%		11:33:31
3	Y 371.029	1258691.6	1258691.6	102.43	%		11:33:31
3	Ag 328.068†	33612.2	33408.5	334.16	µg/L	334.16 ppb	11:33:37
3	As 188.979†	509.7	505.2	1172.0	µg/L	1172.0 ppb	11:33:58
3	B 249.677†	35317.9	34930.7	1589.1	µg/L	1589.1 ppb	11:33:37
3	Ba 233.527†	74224.5	73667.5	2142.7	µg/L	2142.7 ppb	11:33:37
3	Be 313.107†	1236335.7	1222976.9	849.58	µg/L	849.58 ppb	11:33:31
3	Cd 226.502†	22734.1	22694.5	644.74	µg/L	644.74 ppb	11:33:37
3	Co 228.616†	18349.8	18253.5	994.32	µg/L	994.32 ppb	11:33:37
3	Cr 267.716†	111208.9	110435.4	2562.3	µg/L	2562.3 ppb	11:33:37
3	Cu 324.752†	266104.9	260387.8	1988.3	µg/L	1988.3 ppb	11:33:37
3	Mn 257.610†	1611450.1	1599232.0	5935.4	µg/L	5935.4 ppb	11:33:31
3	Mo 202.031†	4319.5	4269.1	544.53	µg/L	544.53 ppb	11:33:58
3	Ni 231.604†	23532.0	23015.4	1451.8	µg/L	1451.8 ppb	11:33:37
3	P 214.914†	4351.2	4115.2	9513.5	µg/L	9513.5 ppb	11:33:58
3	Pb 220.353†	3353.7	3272.0	949.76	µg/L	949.76 ppb	11:33:58
3	S 181.975 Axial†	783.5	752.0	4310.7	µg/L	4310.7 ppb	11:33:58
3	Sb 206.836†	1223.0	1191.2	1291.3	µg/L	1291.3 ppb	11:33:58
3	Se 196.026†	1558.9	1534.5	3271.9	µg/L	3271.9 ppb	11:33:58
3	SiO2†	432419.8	426811.5	90088	µg/L	90088 ppb	11:33:31
3	Si 251.611†	500302.5	496145.8	41615	µg/L	41615 ppb	11:33:31
3	Sn 189.927†	1955.2	1916.7	1170.4	µg/L	1170.4 ppb	11:33:58
3	Ti 334.940†	2639462.9	2618366.2	6528.5	µg/L	6528.5 ppb	11:33:31
3	Tl 190.801†	757.1	774.4	1384.9	µg/L	1384.9 ppb	11:33:58
3	U 409.014†	-1131.9	-890.3	-121.90	µg/L	-121.90 ppb	11:33:37
3	V 292.402†	109706.0	108983.4	1376.8	µg/L	1376.8 ppb	11:33:37
3	Zn 213.857†	218921.9	216565.0	6291.2	µg/L	6291.2 ppb	11:33:37

Mean Data: 1202011894|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1962916.1	101.00	%	0.210				0.21%
Sc RADIAL	77741.7	101	%	0.6				0.64%
Y 371.029	1261270.7	102.64	%	0.214				0.21%
Ag 328.068†	33202.2	332.23	µg/L	2.213	332.23	ppb	2.213	0.67%
Al 396.153Radial†	146355.1	101680	µg/L	528.5	101680	ppb	528.5	0.52%
As 188.979†	504.5	1170.3	µg/L	4.47	1170.3	ppb	4.47	0.38%
B 249.677†	34616.9	1573.5	µg/L	15.04	1573.5	ppb	15.04	0.96%
Ba 233.527†	73224.6	2129.8	µg/L	13.82	2129.8	ppb	13.82	0.65%
Be 313.107†	1215238.1	844.20	µg/L	4.777	844.20	ppb	4.777	0.57%
Ca 317.933Radial†	135622.4	106790	µg/L	429.3	106790	ppb	429.3	0.40%
Cd 226.502†	22521.7	639.57	µg/L	4.757	639.57	ppb	4.757	0.74%
Co 228.616†	18150.4	988.71	µg/L	6.406	988.71	ppb	6.406	0.65%
Cr 267.716†	109774.7	2547.0	µg/L	15.87	2547.0	ppb	15.87	0.62%
Cu 324.752†	258585.5	1974.8	µg/L	14.11	1974.8	ppb	14.11	0.71%
Fe 238.204 Radial†	15311.7	219840	µg/L	652.6	219840	ppb	652.6	0.30%
K 766.490 Radial†	67715.6	44952	µg/L	248.6	44952	ppb	248.6	0.55%
Mg 279.077 IEC†	3949.0	42812	µg/L	228.4	42812	ppb	228.4	0.53%
Mn 257.610†	1589291.2	5898.7	µg/L	32.49	5898.7	ppb	32.49	0.55%
Mo 202.031†	4234.7	540.23	µg/L	3.726	540.23	ppb	3.726	0.69%
Na 589.592 Radial†	37158.5	10671	µg/L	50.7	10671	ppb	50.7	0.48%

Ni 231.604†	22892.5	1444.0 µg/L	7.97	1444.0 ppb	7.97	0.55%
P 214.914†	4088.1	9449.5 µg/L	58.49	9449.5 ppb	58.49	0.62%
Pb 220.353†	3249.2	943.14 µg/L	5.875	943.14 ppb	5.875	0.62%
S 181.975 Axial†	741.6	4251.2 µg/L	51.57	4251.2 ppb	51.57	1.21%
Sb 206.836†	1186.2	1285.8 µg/L	8.51	1285.8 ppb	8.51	0.66%
Se 196.026†	1529.4	3266.6 µg/L	4.80	3266.6 ppb	4.80	0.15%
SiO2†	424162.8	89529 µg/L	506.0	89529 ppb	506.0	0.57%
Si 251.611†	493123.1	41362 µg/L	227.8	41362 ppb	227.8	0.55%
Sn 189.927†	1899.9	1160.8 µg/L	8.94	1160.8 ppb	8.94	0.77%
Sr 421.552†	379550.2	2411.6 µg/L	10.90	2411.6 ppb	10.90	0.45%
Ti 334.940†	2601799.6	6487.1 µg/L	37.44	6487.1 ppb	37.44	0.58%
Tl 190.801†	774.4	1384.3 µg/L	4.20	1384.3 ppb	4.20	0.30%
U 409.014†	-957.6	-128.45 µg/L	5.803	-128.45 ppb	5.803	4.52%
V 292.402†	108349.1	1368.8 µg/L	8.09	1368.8 ppb	8.09	0.59%
Zn 213.857†	215400.0	6257.2 µg/L	37.31	6257.2 ppb	37.31	0.60%

Sequence No.: 35
Sample ID: 244227001|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 329
Date Collected: 1/27/2010 11:34:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227001|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77001.2	77001.2	100	%			11:34:40
1	Al 396.153Radial†	31699.5	31652.8	21994	µg/L	21994	ppb	11:34:40
1	Ca 317.933Radial†	7086.5	6818.1	5368.7	µg/L	5368.7	ppb	11:34:40
1	Fe 238.204 Radial†	5727.3	5698.0	81803	µg/L	81803	ppb	11:35:00
1	K 766.490 Radial†	5476.1	5051.2	3353.2	µg/L	3353.2	ppb	11:34:40
1	Mg 279.077 IEC†	381.7	372.5	3972.1	µg/L	3972.1	ppb	11:35:00
1	Na 589.592 Radial†	3627.4	3073.9	882.71	µg/L	882.71	ppb	11:34:40
1	Sr 421.552†	5676.9	5105.8	32.442	µg/L	32.442	ppb	11:34:40
1	Sc 361.383	1967388.0	1967388.0	101.23	%			11:36:05
1	Y 371.029	1294074.6	1294074.6	105.31	%			11:36:05
1	Ag 328.068†	-748.3	-684.1	-0.9488	µg/L	-0.9488	ppb	11:36:10
1	As 188.979†	4.1	3.5	12.509	µg/L	12.509	ppb	11:36:31
1	B 249.677†	1108.9	980.2	5.1778	µg/L	5.1778	ppb	11:36:10
1	Ba 233.527†	6820.1	6751.5	196.23	µg/L	196.23	ppb	11:36:10
1	Be 313.107†	12565.2	8572.6	4.4785	µg/L	4.4785	ppb	11:36:10
1	Cd 226.502†	222.7	355.5	1.2778	µg/L	1.2778	ppb	11:36:10
1	Co 228.616†	240.1	282.2	7.3931	µg/L	7.3931	ppb	11:36:31
1	Cr 267.716†	4719.4	4744.6	110.07	µg/L	110.07	ppb	11:36:10
1	Cu 324.752†	4495.0	772.0	17.175	µg/L	17.175	ppb	11:36:10
1	Mn 257.610†	554711.8	548136.1	2035.7	µg/L	2035.7	ppb	11:36:05
1	Mo 202.031†	58.8	40.9	8.2440	µg/L	8.2440	ppb	11:36:31
1	Ni 231.604†	1256.3	905.6	58.102	µg/L	58.102	ppb	11:36:31
1	P 214.914†	485.6	277.2	602.64	µg/L	602.64	ppb	11:36:31
1	Pb 220.353†	142.9	85.2	23.089	µg/L	23.089	ppb	11:36:31
1	S 181.975 Axial†	30.6	4.7	27.072	µg/L	27.072	ppb	11:36:31
1	Sb 206.836†	28.9	6.2	5.3141	µg/L	5.3141	ppb	11:36:31
1	Se 196.026†	-192.5	-202.6	-7.1852	µg/L	-7.1852	ppb	11:36:31
1	SiO2†	250409.9	245077.1	51729	µg/L	51729	ppb	11:36:05
1	Si 251.611†	288484.8	284661.9	23877	µg/L	23877	ppb	11:36:05
1	Sn 189.927†	-10.3	-33.6	-10.146	µg/L	-10.146	ppb	11:36:31
1	Ti 334.940†	1592647.8	1572450.3	3921.4	µg/L	3921.4	ppb	11:36:05
1	Tl 190.801†	-37.0	-13.5	14.669	µg/L	14.669	ppb	11:36:31
1	U 409.014†	-1500.3	-1249.0	-130.89	µg/L	-130.89	ppb	11:36:05
1	V 292.402†	3267.0	3349.3	46.153	µg/L	46.153	ppb	11:36:10
1	Zn 213.857†	13901.0	13060.1	376.37	µg/L	376.37	ppb	11:36:10
2	Sc RADIAL	76979.6	76979.6	100	%			11:35:06
2	Al 396.153Radial†	31909.2	31870.9	22145	µg/L	22145	ppb	11:35:06
2	Ca 317.933Radial†	7122.0	6855.5	5398.2	µg/L	5398.2	ppb	11:35:06
2	Fe 238.204 Radial†	5762.9	5735.0	82335	µg/L	82335	ppb	11:35:26
2	K 766.490 Radial†	5521.3	5097.8	3384.1	µg/L	3384.1	ppb	11:35:06
2	Mg 279.077 IEC†	384.1	375.0	3999.0	µg/L	3999.0	ppb	11:35:26
2	Na 589.592 Radial†	3708.9	3156.3	906.37	µg/L	906.37	ppb	11:35:06
2	Sr 421.552†	5705.9	5136.4	32.636	µg/L	32.636	ppb	11:35:06
2	Sc 361.383	1956849.6	1956849.6	100.69	%			11:36:39
2	Y 371.029	1286469.4	1286469.4	104.69	%			11:36:39
2	Ag 328.068†	-773.7	-713.3	-1.1857	µg/L	-1.1857	ppb	11:36:44
2	As 188.979†	4.4	3.8	13.261	µg/L	13.261	ppb	11:37:04
2	B 249.677†	1073.6	951.0	3.4826	µg/L	3.4826	ppb	11:36:44
2	Ba 233.527†	6845.6	6813.1	198.02	µg/L	198.02	ppb	11:36:44
2	Be 313.107†	12442.6	8517.7	4.4563	µg/L	4.4563	ppb	11:36:44
2	Cd 226.502†	222.0	355.9	1.2306	µg/L	1.2306	ppb	11:36:44
2	Co 228.616†	236.0	279.4	7.3271	µg/L	7.3271	ppb	11:37:04
2	Cr 267.716†	4800.9	4850.6	112.53	µg/L	112.53	ppb	11:36:44
2	Cu 324.752†	4377.4	679.1	16.550	µg/L	16.550	ppb	11:36:44
2	Mn 257.610†	545590.6	542028.5	2013.2	µg/L	2013.2	ppb	11:36:39
2	Mo 202.031†	53.6	36.0	7.6550	µg/L	7.6550	ppb	11:37:04
2	Ni 231.604†	1267.3	923.1	59.215	µg/L	59.215	ppb	11:37:04
2	P 214.914†	488.1	282.3	614.47	µg/L	614.47	ppb	11:37:04
2	Pb 220.353†	143.0	86.1	23.313	µg/L	23.313	ppb	11:37:04

2	S 181.975 Axial†	35.5	9.8	56.008 µg/L	56.008 ppb	11:37:04
2	Sb 206.836†	24.8	2.3	0.9642 µg/L	0.9642 ppb	11:37:04
2	Se 196.026†	-196.5	-207.6	-13.004 µg/L	-13.004 ppb	11:37:04
2	SiO2†	246534.7	242560.7	51198 µg/L	51198 ppb	11:36:39
2	Si 251.611†	284092.1	281834.1	23639 µg/L	23639 ppb	11:36:39
2	Sn 189.927†	-11.2	-34.5	-10.596 µg/L	-10.596 ppb	11:37:04
2	Ti 334.940†	1567068.2	1555519.0	3879.2 µg/L	3879.2 ppb	11:36:39
2	Tl 190.801†	-46.3	-22.9	-1.9536 µg/L	-1.9536 ppb	11:37:04
2	U 409.014†	-1440.8	-1197.9	-126.09 µg/L	-126.09 ppb	11:36:39
2	V 292.402†	3264.4	3364.1	46.371 µg/L	46.371 ppb	11:36:44
2	Zn 213.857†	13873.4	13106.7	377.70 µg/L	377.70 ppb	11:36:44
3	Sc RADIAL	75827.9	75827.9	98.7 %		11:35:31
3	Al 396.153Radial†	31765.2	32208.6	22380 µg/L	22380 ppb	11:35:31
3	Ca 317.933Radial†	6998.0	6837.8	5384.2 µg/L	5384.2 ppb	11:35:31
3	Fe 238.204 Radial†	5761.4	5820.9	83567 µg/L	83567 ppb	11:35:52
3	K 766.490 Radial†	5537.4	5197.8	3450.5 µg/L	3450.5 ppb	11:35:31
3	Mg 279.077 IEC†	384.2	380.9	4062.1 µg/L	4062.1 ppb	11:35:52
3	Na 589.592 Radial†	3662.6	3165.6	909.05 µg/L	909.05 ppb	11:35:31
3	Sr 421.552†	5662.4	5178.7	32.905 µg/L	32.905 ppb	11:35:31
3	Sc 361.383	1961759.7	1961759.7	100.95 %		11:37:12
3	Y 371.029	1287887.6	1287887.6	104.81 %		11:37:12
3	Ag 328.068†	-787.3	-724.8	-1.2277 µg/L	-1.2277 ppb	11:37:18
3	As 188.979†	6.1	5.5	17.268 µg/L	17.268 ppb	11:37:38
3	B 249.677†	1062.6	937.4	2.1712 µg/L	2.1712 ppb	11:37:18
3	Ba 233.527†	6630.9	6583.4	191.34 µg/L	191.34 ppb	11:37:18
3	Be 313.107†	12043.8	8091.6	4.1730 µg/L	4.1730 ppb	11:37:18
3	Cd 226.502†	195.4	329.0	0.2960 µg/L	0.2960 ppb	11:37:18
3	Co 228.616†	225.4	268.3	6.7926 µg/L	6.7926 ppb	11:37:38
3	Cr 267.716†	4565.2	4605.3	106.84 µg/L	106.84 ppb	11:37:18
3	Cu 324.752†	4389.5	680.2	16.730 µg/L	16.730 ppb	11:37:18
3	Mn 257.610†	542798.1	537905.9	1998.1 µg/L	1998.1 ppb	11:37:12
3	Mo 202.031†	54.5	36.8	7.8020 µg/L	7.8020 ppb	11:37:38
3	Ni 231.604†	1207.4	860.7	55.297 µg/L	55.297 ppb	11:37:38
3	P 214.914†	466.5	259.6	559.43 µg/L	559.43 ppb	11:37:38
3	Pb 220.353†	150.2	92.8	25.244 µg/L	25.244 ppb	11:37:38
3	S 181.975 Axial†	31.7	5.9	33.624 µg/L	33.624 ppb	11:37:38
3	Sb 206.836†	17.6	-5.0	-6.9731 µg/L	-6.9731 ppb	11:37:38
3	Se 196.026†	-173.7	-184.5	28.104 µg/L	28.104 ppb	11:37:38
3	SiO2†	246203.8	241620.1	50999 µg/L	50999 ppb	11:37:12
3	Si 251.611†	283829.7	280868.0	23558 µg/L	23558 ppb	11:37:12
3	Sn 189.927†	-5.2	-28.6	-7.0142 µg/L	-7.0142 ppb	11:37:38
3	Ti 334.940†	1556629.1	1541282.4	3843.7 µg/L	3843.7 ppb	11:37:12
3	Tl 190.801†	-44.0	-20.5	1.7474 µg/L	1.7474 ppb	11:37:38
3	U 409.014†	-1360.8	-1115.1	-118.36 µg/L	-118.36 ppb	11:37:12
3	V 292.402†	3123.7	3216.5	44.597 µg/L	44.597 ppb	11:37:18
3	Zn 213.857†	13451.5	12654.2	364.46 µg/L	364.46 ppb	11:37:18

Mean Data: 244227001|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1961999.1	100.96	%	0.271				0.27%
Sc RADIAL	76602.9	99.7	%	0.87				0.88%
Y 371.029	1289477.2	104.94	%	0.329				0.31%
Ag 328.068†	-707.4	-1.1207	µg/L	0.15041	-1.1207	ppb	0.15041	13.42%
Al 396.153Radial†	31910.7	22173	µg/L	194.6	22173	ppb	194.6	0.88%
As 188.979†	4.3	14.346	µg/L	2.5583	14.346	ppb	2.5583	17.83%
B 249.677†	956.2	3.6105	µg/L	1.50742	3.6105	ppb	1.50742	41.75%
Ba 233.527†	6716.0	195.19	µg/L	3.456	195.19	ppb	3.456	1.77%
Be 313.107†	8393.9	4.3693	µg/L	0.17033	4.3693	ppb	0.17033	3.90%
Ca 317.933Radial†	6837.1	5383.7	µg/L	14.73	5383.7	ppb	14.73	0.27%
Cd 226.502†	346.8	0.9348	µg/L	0.55370	0.9348	ppb	0.55370	59.23%
Co 228.616†	276.6	7.1709	µg/L	0.32927	7.1709	ppb	0.32927	4.59%
Cr 267.716†	4733.5	109.82	µg/L	2.855	109.82	ppb	2.855	2.60%
Cu 324.752†	710.4	16.818	µg/L	0.3214	16.818	ppb	0.3214	1.91%
Fe 238.204 Radial†	5751.3	82568	µg/L	905.1	82568	ppb	905.1	1.10%
K 766.490 Radial†	5115.6	3395.9	µg/L	49.73	3395.9	ppb	49.73	1.46%
Mg 279.077 IEC†	376.2	4011.1	µg/L	46.21	4011.1	ppb	46.21	1.15%
Mn 257.610†	542690.2	2015.6	µg/L	18.90	2015.6	ppb	18.90	0.94%
Mo 202.031†	37.9	7.9003	µg/L	0.30659	7.9003	ppb	0.30659	3.88%
Na 589.592 Radial†	3131.9	899.38	µg/L	14.494	899.38	ppb	14.494	1.61%

Ni 231.604†	896.5	57.538	µg/L	2.0188	57.538	ppb	2.0188	3.51%
P 214.914†	273.0	592.18	µg/L	28.973	592.18	ppb	28.973	4.89%
Pb 220.353†	88.1	23.882	µg/L	1.1845	23.882	ppb	1.1845	4.96%
S 181.975 Axial†	6.8	38.901	µg/L	15.1729	38.901	ppb	15.1729	39.00%
Sb 206.836†	1.2	-0.2316	µg/L	6.23028	-0.2316	ppb	6.23028	>999.9%
Se 196.026†	-198.2	2.6383	µg/L	22.24514	2.6383	ppb	22.24514	843.15%
SiO2†	243086.0	51309	µg/L	377.3	51309	ppb	377.3	0.74%
Si 251.611†	282454.7	23691	µg/L	165.4	23691	ppb	165.4	0.70%
Sn 189.927†	-32.2	-9.2521	µg/L	1.95107	-9.2521	ppb	1.95107	21.09%
Sr 421.552†	5140.3	32.661	µg/L	0.2328	32.661	ppb	0.2328	0.71%
Ti 334.940†	1556417.2	3881.4	µg/L	38.92	3881.4	ppb	38.92	1.00%
Tl 190.801†	-19.0	4.8210	µg/L	8.72719	4.8210	ppb	8.72719	181.02%
U 409.014†	-1187.3	-125.11	µg/L	6.323	-125.11	ppb	6.323	5.05%
V 292.402†	3310.0	45.707	µg/L	0.9673	45.707	ppb	0.9673	2.12%
Zn 213.857†	12940.3	372.84	µg/L	7.289	372.84	ppb	7.289	1.96%

Sequence No.: 36
Sample ID: 1202011895|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 330
Date Collected: 1/27/2010 11:37:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011895|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76117.5	76117.5	99.1	%			11:38:20
1	Al 396.153Radial†	33070.3	33403.3	23210	µg/L	23210	ppb	11:38:20
1	Ca 317.933Radial†	6920.3	6732.5	5301.3	µg/L	5301.3	ppb	11:38:20
1	Fe 238.204 Radial†	5639.6	5675.8	81484	µg/L	81484	ppb	11:38:40
1	K 766.490 Radial†	5588.5	5228.0	3470.6	µg/L	3470.6	ppb	11:38:20
1	Mg 279.077 IEC†	409.1	404.6	4322.3	µg/L	4322.3	ppb	11:38:40
1	Na 589.592 Radial†	3363.2	2849.3	818.21	µg/L	818.21	ppb	11:38:20
1	Sr 421.552†	5963.2	5460.5	34.696	µg/L	34.696	ppb	11:38:20
1	Sc 361.383	1967151.0	1967151.0	101.22	%			11:39:45
1	Y 371.029	1291466.4	1291466.4	105.10	%			11:39:45
1	Ag 328.068†	-764.8	-700.5	-1.1429	µg/L	-1.1429	ppb	11:39:51
1	As 188.979†	-0.6	-1.2	1.7391	µg/L	1.7391	ppb	11:40:11
1	B 249.677†	1054.7	926.8	2.7854	µg/L	2.7854	ppb	11:39:51
1	Ba 233.527†	6521.2	6456.9	187.66	µg/L	187.66	ppb	11:39:51
1	Be 313.107†	11992.8	8008.5	4.1105	µg/L	4.1105	ppb	11:39:51
1	Cd 226.502†	197.1	330.2	0.5778	µg/L	0.5778	ppb	11:39:51
1	Co 228.616†	230.9	273.2	7.0325	µg/L	7.0325	ppb	11:40:11
1	Cr 267.716†	5817.9	5830.5	135.26	µg/L	135.26	ppb	11:39:51
1	Cu 324.752†	4388.6	667.4	16.344	µg/L	16.344	ppb	11:39:51
1	Mn 257.610†	513209.3	507200.8	1884.4	µg/L	1884.4	ppb	11:39:45
1	Mo 202.031†	52.0	34.2	7.3884	µg/L	7.3884	ppb	11:40:11
1	Ni 231.604†	1402.2	1049.9	67.190	µg/L	67.190	ppb	11:40:11
1	P 214.914†	456.1	248.1	533.66	µg/L	533.66	ppb	11:40:11
1	Pb 220.353†	153.6	95.8	26.231	µg/L	26.231	ppb	11:40:11
1	S 181.975 Axial†	32.8	6.9	39.670	µg/L	39.670	ppb	11:40:11
1	Sb 206.836†	23.2	0.5	-1.2653	µg/L	-1.2653	ppb	11:40:11
1	Se 196.026†	-186.6	-196.8	0.6235	µg/L	0.6235	ppb	11:40:11
1	SiO2†	246632.4	241375.1	50948	µg/L	50948	ppb	11:39:45
1	Si 251.611†	284195.1	280458.4	23524	µg/L	23524	ppb	11:39:45
1	Sn 189.927†	-10.6	-33.9	-10.294	µg/L	-10.294	ppb	11:40:11
1	Ti 334.940†	1565843.3	1546159.0	3855.8	µg/L	3855.8	ppb	11:39:45
1	Tl 190.801†	-42.3	-18.8	4.5083	µg/L	4.5083	ppb	11:40:11
1	U 409.014†	-1399.5	-1149.6	-121.36	µg/L	-121.36	ppb	11:39:45
1	V 292.402†	3001.2	3087.1	42.937	µg/L	42.937	ppb	11:39:51
1	Zn 213.857†	13549.3	12714.3	366.24	µg/L	366.24	ppb	11:39:51
2	Sc RADIAL	76816.1	76816.1	100.0	%			11:38:46
2	Al 396.153Radial†	33432.9	33462.4	23251	µg/L	23251	ppb	11:38:46
2	Ca 317.933Radial†	7040.6	6789.2	5346.0	µg/L	5346.0	ppb	11:38:46
2	Fe 238.204 Radial†	5640.8	5625.2	80758	µg/L	80758	ppb	11:39:06
2	K 766.490 Radial†	5637.1	5225.4	3468.8	µg/L	3468.8	ppb	11:38:46
2	Mg 279.077 IEC†	407.0	398.8	4259.2	µg/L	4259.2	ppb	11:39:06
2	Na 589.592 Radial†	3339.4	2794.6	802.50	µg/L	802.50	ppb	11:38:46
2	Sr 421.552†	6021.4	5464.0	34.718	µg/L	34.718	ppb	11:38:46
2	Sc 361.383	1956906.9	1956906.9	100.70	%			11:40:19
2	Y 371.029	1285560.8	1285560.8	104.62	%			11:40:19
2	Ag 328.068†	-847.3	-786.4	-1.9880	µg/L	-1.9880	ppb	11:40:25
2	As 188.979†	7.3	6.7	19.911	µg/L	19.911	ppb	11:40:45
2	B 249.677†	1033.7	911.3	2.4135	µg/L	2.4135	ppb	11:40:25
2	Ba 233.527†	6514.1	6483.6	188.44	µg/L	188.44	ppb	11:40:25
2	Be 313.107†	12078.5	8155.7	4.2107	µg/L	4.2107	ppb	11:40:25
2	Cd 226.502†	191.4	325.6	0.5251	µg/L	0.5251	ppb	11:40:25
2	Co 228.616†	231.1	274.6	7.0970	µg/L	7.0970	ppb	11:40:45
2	Cr 267.716†	5809.3	5852.0	135.76	µg/L	135.76	ppb	11:40:25
2	Cu 324.752†	4419.3	720.6	16.643	µg/L	16.643	ppb	11:40:25
2	Mn 257.610†	511410.4	508068.5	1887.5	µg/L	1887.5	ppb	11:40:19
2	Mo 202.031†	52.8	35.2	7.4896	µg/L	7.4896	ppb	11:40:45
2	Ni 231.604†	1404.9	1059.8	67.804	µg/L	67.804	ppb	11:40:45
2	P 214.914†	440.6	235.1	503.07	µg/L	503.07	ppb	11:40:45
2	Pb 220.353†	143.9	87.0	23.703	µg/L	23.703	ppb	11:40:45

2	S 181.975 Axial†	34.6	8.9	50.943 µg/L	50.943 ppb	11:40:45
2	Sb 206.836†	22.8	0.3	-1.5071 µg/L	-1.5071 ppb	11:40:45
2	Se 196.026†	-190.2	-201.3	-9.2092 µg/L	-9.2092 ppb	11:40:45
2	SiO2†	245601.0	241626.3	51001 µg/L	51001 ppb	11:40:19
2	Si 251.611†	282896.2	280638.2	23539 µg/L	23539 ppb	11:40:19
2	Sn 189.927†	-9.2	-32.6	-9.5832 µg/L	-9.5832 ppb	11:40:45
2	Ti 334.940†	1560190.8	1548643.4	3862.0 µg/L	3862.0 ppb	11:40:19
2	Tl 190.801†	-38.8	-15.5	10.195 µg/L	10.195 ppb	11:40:45
2	U 409.014†	-1365.2	-1122.8	-118.70 µg/L	-118.70 ppb	11:40:19
2	V 292.402†	2999.5	3100.9	43.075 µg/L	43.075 ppb	11:40:25
2	Zn 213.857†	13614.5	12849.2	370.21 µg/L	370.21 ppb	11:40:25
3	Sc RADIAL	75612.4	75612.4	98.4 %		11:39:12
3	Al 396.153Radial†	33212.5	33770.8	23466 µg/L	23466 ppb	11:39:12
3	Ca 317.933Radial†	6944.5	6803.7	5357.4 µg/L	5357.4 ppb	11:39:12
3	Fe 238.204 Radial†	5627.4	5701.4	81852 µg/L	81852 ppb	11:39:32
3	K 766.490 Radial†	5604.2	5281.7	3506.2 µg/L	3506.2 ppb	11:39:12
3	Mg 279.077 IEC†	405.8	404.0	4315.1 µg/L	4315.1 ppb	11:39:32
3	Na 589.592 Radial†	3357.7	2866.4	823.12 µg/L	823.12 ppb	11:39:12
3	Sr 421.552†	5894.0	5430.5	34.505 µg/L	34.505 ppb	11:39:12
3	Sc 361.383	1952532.5	1952532.5	100.47 %		11:40:53
3	Y 371.029	1282263.8	1282263.8	104.35 %		11:40:53
3	Ag 328.068†	-738.3	-679.8	-0.9306 µg/L	-0.9306 ppb	11:40:58
3	As 188.979†	3.2	2.7	10.616 µg/L	10.616 ppb	11:41:19
3	B 249.677†	989.2	869.3	-0.2108 µg/L	-0.2108 ppb	11:40:58
3	Ba 233.527†	6306.3	6291.3	182.85 µg/L	182.85 ppb	11:40:58
3	Be 313.107†	11780.0	7885.4	4.0444 µg/L	4.0444 ppb	11:40:58
3	Cd 226.502†	203.6	338.2	0.7673 µg/L	0.7673 ppb	11:40:58
3	Co 228.616†	213.0	257.0	6.2500 µg/L	6.2500 ppb	11:41:19
3	Cr 267.716†	5522.9	5579.9	129.45 µg/L	129.45 ppb	11:40:58
3	Cu 324.752†	4337.2	648.7	16.255 µg/L	16.255 ppb	11:40:58
3	Mn 257.610†	504036.0	501866.4	1864.7 µg/L	1864.7 ppb	11:40:53
3	Mo 202.031†	55.0	37.5	7.8241 µg/L	7.8241 ppb	11:41:19
3	Ni 231.604†	1330.8	989.2	63.370 µg/L	63.370 ppb	11:41:19
3	P 214.914†	435.0	230.5	491.43 µg/L	491.43 ppb	11:41:19
3	Pb 220.353†	145.2	88.6	24.140 µg/L	24.140 ppb	11:41:19
3	S 181.975 Axial†	30.4	4.8	27.398 µg/L	27.398 ppb	11:41:19
3	Sb 206.836†	22.5	0.0	-1.6988 µg/L	-1.6988 ppb	11:41:19
3	Se 196.026†	-170.2	-181.8	25.668 µg/L	25.668 ppb	11:41:19
3	SiO2†	242966.7	239550.7	50563 µg/L	50563 ppb	11:40:53
3	Si 251.611†	279869.9	278255.5	23339 µg/L	23339 ppb	11:40:53
3	Sn 189.927†	-4.8	-28.2	-6.9026 µg/L	-6.9026 ppb	11:41:19
3	Ti 334.940†	1533398.2	1525447.5	3804.2 µg/L	3804.2 ppb	11:40:53
3	Tl 190.801†	-38.8	-15.6	9.4191 µg/L	9.4191 ppb	11:41:19
3	U 409.014†	-1457.3	-1217.5	-127.89 µg/L	-127.89 ppb	11:40:53
3	V 292.402†	2931.8	3040.2	42.356 µg/L	42.356 ppb	11:40:58
3	Zn 213.857†	13163.0	12430.1	357.96 µg/L	357.96 ppb	11:40:58

Mean Data: 1202011895|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1958863.5	100.80	%	0.386				0.38%
Sc RADIAL	76182.0	99.2	%	0.79				0.79%
Y 371.029	1286430.3	104.69	%	0.379				0.36%
Ag 328.068†	-722.2	-1.3539	µg/L	0.55935	-1.3539	ppb	0.55935	41.32%
Al 396.153Radial†	33545.5	23309	µg/L	137.1	23309	ppb	137.1	0.59%
As 188.979†	2.7	10.755	µg/L	9.0867	10.755	ppb	9.0867	84.49%
B 249.677†	902.5	1.6627	µg/L	1.63313	1.6627	ppb	1.63313	98.22%
Ba 233.527†	6410.6	186.32	µg/L	3.029	186.32	ppb	3.029	1.63%
Be 313.107†	8016.6	4.1218	µg/L	0.08372	4.1218	ppb	0.08372	2.03%
Ca 317.933Radial†	6775.1	5334.9	µg/L	29.63	5334.9	ppb	29.63	0.56%
Cd 226.502†	331.3	0.6234	µg/L	0.12734	0.6234	ppb	0.12734	20.43%
Co 228.616†	268.2	6.7932	µg/L	0.47153	6.7932	ppb	0.47153	6.94%
Cr 267.716†	5754.1	133.49	µg/L	3.509	133.49	ppb	3.509	2.63%
Cu 324.752†	678.9	16.414	µg/L	0.2036	16.414	ppb	0.2036	1.24%
Fe 238.204 Radial†	5667.5	81365	µg/L	556.4	81365	ppb	556.4	0.68%
K 766.490 Radial†	5245.1	3481.9	µg/L	21.11	3481.9	ppb	21.11	0.61%
Mg 279.077 IEC†	402.4	4298.9	µg/L	34.53	4298.9	ppb	34.53	0.80%
Mn 257.610†	505711.9	1878.9	µg/L	12.35	1878.9	ppb	12.35	0.66%
Mo 202.031†	35.6	7.5674	µg/L	0.22800	7.5674	ppb	0.22800	3.01%
Na 589.592 Radial†	2836.8	814.61	µg/L	10.769	814.61	ppb	10.769	1.32%

Ni 231.604†	1032.9	66.121	µg/L	2.4023	66.121	ppb	2.4023	3.63%
P 214.914†	237.9	509.39	µg/L	21.812	509.39	ppb	21.812	4.28%
Pb 220.353†	90.5	24.692	µg/L	1.3514	24.692	ppb	1.3514	5.47%
S 181.975 Axial†	6.9	39.337	µg/L	11.7760	39.337	ppb	11.7760	29.94%
Sb 206.836†	0.3	-1.4904	µg/L	0.21723	-1.4904	ppb	0.21723	14.58%
Se 196.026†	-193.3	5.6940	µg/L	17.98287	5.6940	ppb	17.98287	315.82%
SiO2†	240850.7	50837	µg/L	239.1	50837	ppb	239.1	0.47%
Si 251.611†	279784.0	23467	µg/L	111.3	23467	ppb	111.3	0.47%
Sn 189.927†	-31.6	-8.9266	µg/L	1.78851	-8.9266	ppb	1.78851	20.04%
Sr 421.552†	5451.7	34.639	µg/L	0.1172	34.639	ppb	0.1172	0.34%
Ti 334.940†	1540083.3	3840.7	µg/L	31.76	3840.7	ppb	31.76	0.83%
Tl 190.801†	-16.6	8.0410	µg/L	3.08390	8.0410	ppb	3.08390	38.35%
U 409.014†	-1163.3	-122.65	µg/L	4.728	-122.65	ppb	4.728	3.85%
V 292.402†	3076.1	42.789	µg/L	0.3814	42.789	ppb	0.3814	0.89%
Zn 213.857†	12664.5	364.80	µg/L	6.252	364.80	ppb	6.252	1.71%

Sequence No.: 37
Sample ID: 1202011896|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 331
Date Collected: 1/27/2010 11:41:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011896|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77359.3	77359.3	101	%			11:42:01
1	Al 396.153Radial†	63222.6	62809.6	43632	µg/L	43632	ppb	11:42:01
1	Ca 317.933Radial†	14747.3	14392.8	11333	µg/L	11333	ppb	11:42:01
1	Fe 238.204 Radial†	6816.6	6753.2	96963	µg/L	96963	ppb	11:42:21
1	K 766.490 Radial†	17192.7	16660.8	11060	µg/L	11060	ppb	11:42:01
1	Mg 279.077 IEC†	1086.8	1070.9	11576	µg/L	11576	ppb	11:42:21
1	Na 589.592 Radial†	26162.3	25434.9	7304.0	µg/L	7304.0	ppb	11:42:01
1	Sr 421.552†	92309.6	91108.0	578.89	µg/L	578.89	ppb	11:42:01
1	Sc 361.383	1969364.3	1969364.3	101.34	%			11:43:27
1	Y 371.029	1320570.5	1320570.5	107.47	%			11:43:27
1	Ag 328.068†	57432.9	56730.6	538.78	µg/L	538.78	ppb	11:43:33
1	As 188.979†	251.1	247.2	574.45	µg/L	574.45	ppb	11:43:53
1	B 249.677†	12400.5	12121.8	540.17	µg/L	540.17	ppb	11:43:33
1	Ba 233.527†	27595.7	27246.3	792.64	µg/L	792.64	ppb	11:43:33
1	Be 313.107†	811407.4	796867.7	553.26	µg/L	553.26	ppb	11:43:27
1	Cd 226.502†	18819.5	18706.8	540.31	µg/L	540.31	ppb	11:43:33
1	Co 228.616†	10021.0	9933.8	538.21	µg/L	538.21	ppb	11:43:33
1	Cr 267.716†	28386.7	28095.2	652.02	µg/L	652.02	ppb	11:43:33
1	Cu 324.752†	80818.5	76084.5	585.55	µg/L	585.55	ppb	11:43:33
1	Mn 257.610†	899477.0	887804.9	3292.2	µg/L	3292.2	ppb	11:43:27
1	Mo 202.031†	4249.1	4175.9	528.18	µg/L	528.18	ppb	11:43:53
1	Ni 231.604†	9988.6	9521.4	600.51	µg/L	600.51	ppb	11:43:33
1	P 214.914†	768.5	555.9	1212.5	µg/L	1212.5	ppb	11:43:53
1	Pb 220.353†	2131.5	2047.5	595.93	µg/L	595.93	ppb	11:43:53
1	S 181.975 Axial†	1012.7	973.9	5582.5	µg/L	5582.5	ppb	11:43:53
1	Sb 206.836†	500.2	471.2	522.07	µg/L	522.07	ppb	11:43:53
1	Se 196.026†	130.0	115.9	552.30	µg/L	552.30	ppb	11:43:53
1	SiO2†	322100.9	315574.5	66609	µg/L	66609	ppb	11:43:27
1	Si 251.611†	372165.8	366953.5	30779	µg/L	30779	ppb	11:43:27
1	Sn 189.927†	977.5	941.2	563.01	µg/L	563.01	ppb	11:43:53
1	Ti 334.940†	2052883.4	2025037.8	5049.7	µg/L	5049.7	ppb	11:43:27
1	Tl 190.801†	270.7	290.2	550.37	µg/L	550.37	ppb	11:43:53
1	U 409.014†	4158.0	4336.1	399.62	µg/L	399.62	ppb	11:43:27
1	V 292.402†	47447.7	46944.1	594.86	µg/L	594.86	ppb	11:43:33
1	Zn 213.857†	34298.7	33175.1	958.33	µg/L	958.33	ppb	11:43:33
2	Sc RADIAL	77979.9	77979.9	102	%			11:42:27
2	Al 396.153Radial†	62728.1	61822.8	42947	µg/L	42947	ppb	11:42:27
2	Ca 317.933Radial†	14619.8	14150.7	11143	µg/L	11143	ppb	11:42:27
2	Fe 238.204 Radial†	6786.5	6669.7	95764	µg/L	95764	ppb	11:42:47
2	K 766.490 Radial†	17122.4	16455.6	10924	µg/L	10924	ppb	11:42:27
2	Mg 279.077 IEC†	1089.0	1064.4	11507	µg/L	11507	ppb	11:42:47
2	Na 589.592 Radial†	25959.4	25028.3	7187.2	µg/L	7187.2	ppb	11:42:27
2	Sr 421.552†	91655.4	89734.1	570.16	µg/L	570.16	ppb	11:42:27
2	Sc 361.383	1953999.2	1953999.2	100.55	%			11:44:01
2	Y 371.029	1310481.4	1310481.4	106.65	%			11:44:01
2	Ag 328.068†	58214.6	57953.7	550.17	µg/L	550.17	ppb	11:44:07
2	As 188.979†	248.3	246.4	572.49	µg/L	572.49	ppb	11:44:27
2	B 249.677†	12531.5	12348.3	551.84	µg/L	551.84	ppb	11:44:07
2	Ba 233.527†	27905.8	27768.8	807.84	µg/L	807.84	ppb	11:44:07
2	Be 313.107†	805059.2	796850.3	553.25	µg/L	553.25	ppb	11:44:01
2	Cd 226.502†	19111.1	19142.8	553.30	µg/L	553.30	ppb	11:44:07
2	Co 228.616†	10133.0	10123.0	548.64	µg/L	548.64	ppb	11:44:07
2	Cr 267.716†	28707.8	28634.8	664.54	µg/L	664.54	ppb	11:44:07
2	Cu 324.752†	81786.3	77674.2	597.33	µg/L	597.33	ppb	11:44:07
2	Mn 257.610†	892286.8	887633.4	3291.4	µg/L	3291.4	ppb	11:44:01
2	Mo 202.031†	4260.9	4220.6	533.75	µg/L	533.75	ppb	11:44:27
2	Ni 231.604†	10121.1	9730.8	613.67	µg/L	613.67	ppb	11:44:07
2	P 214.914†	771.1	564.4	1232.4	µg/L	1232.4	ppb	11:44:27
2	Pb 220.353†	2124.6	2057.1	598.75	µg/L	598.75	ppb	11:44:27

2	S 181.975 Axial†	1015.5	984.5	5643.2 µg/L	5643.2 ppb	11:44:27
2	Sb 206.836†	496.0	470.9	521.64 µg/L	521.64 ppb	11:44:27
2	Se 196.026†	145.2	132.0	573.17 µg/L	573.17 ppb	11:44:27
2	SiO2†	320075.5	316059.5	66712 µg/L	66712 ppb	11:44:01
2	Si 251.611†	369405.2	367095.8	30791 µg/L	30791 ppb	11:44:01
2	Sn 189.927†	975.5	946.8	566.13 µg/L	566.13 ppb	11:44:27
2	Ti 334.940†	2039791.5	2027946.8	5056.9 µg/L	5056.9 ppb	11:44:01
2	Tl 190.801†	272.7	294.3	557.56 µg/L	557.56 ppb	11:44:27
2	U 409.014†	4044.3	4255.4	392.09 µg/L	392.09 ppb	11:44:01
2	V 292.402†	47928.4	47790.4	605.38 µg/L	605.38 ppb	11:44:07
2	Zn 213.857†	34652.8	33793.4	976.34 µg/L	976.34 ppb	11:44:07
3	Sc RADIAL	78276.6	78276.6	102 %		11:42:53
3	Al 396.153Radial†	63055.8	61910.1	43008 µg/L	43008 ppb	11:42:53
3	Ca 317.933Radial†	14675.7	14150.9	11143 µg/L	11143 ppb	11:42:53
3	Fe 238.204 Radial†	6812.5	6669.8	95765 µg/L	95765 ppb	11:43:13
3	K 766.490 Radial†	17178.4	16446.6	10918 µg/L	10918 ppb	11:42:53
3	Mg 279.077 IEC†	1093.5	1064.8	11511 µg/L	11511 ppb	11:43:13
3	Na 589.592 Radial†	26047.1	25017.4	7184.1 µg/L	7184.1 ppb	11:42:53
3	Sr 421.552†	92037.4	89766.6	570.37 µg/L	570.37 ppb	11:42:53
3	Sc 361.383	1971537.3	1971537.3	101.45 %		11:44:36
3	Y 371.029	1321665.2	1321665.2	107.56 %		11:44:36
3	Ag 328.068†	56994.3	56235.8	533.97 µg/L	533.97 ppb	11:44:41
3	As 188.979†	239.6	235.6	547.78 µg/L	547.78 ppb	11:45:02
3	B 249.677†	12239.3	11949.4	532.38 µg/L	532.38 ppb	11:44:41
3	Ba 233.527†	27055.5	26683.8	776.27 µg/L	776.27 ppb	11:44:41
3	Be 313.107†	797650.6	782424.8	543.24 µg/L	543.24 ppb	11:44:36
3	Cd 226.502†	18570.5	18440.8	532.60 µg/L	532.60 ppb	11:44:41
3	Co 228.616†	9776.3	9681.8	524.47 µg/L	524.47 ppb	11:44:41
3	Cr 267.716†	27518.1	27208.0	631.43 µg/L	631.43 ppb	11:44:41
3	Cu 324.752†	78993.1	74197.3	571.19 µg/L	571.19 ppb	11:44:41
3	Mn 257.610†	884882.3	872440.2	3235.3 µg/L	3235.3 ppb	11:44:36
3	Mo 202.031†	3985.8	3911.7	494.95 µg/L	494.95 ppb	11:45:02
3	Ni 231.604†	9742.0	9267.5	584.51 µg/L	584.51 ppb	11:44:41
3	P 214.914†	739.7	526.6	1144.1 µg/L	1144.1 ppb	11:45:02
3	Pb 220.353†	2037.8	1952.7	568.25 µg/L	568.25 ppb	11:45:02
3	S 181.975 Axial†	980.2	940.7	5392.6 µg/L	5392.6 ppb	11:45:02
3	Sb 206.836†	470.8	441.7	489.06 µg/L	489.06 ppb	11:45:02
3	Se 196.026†	136.8	122.4	558.03 µg/L	558.03 ppb	11:45:02
3	SiO2†	317377.3	310568.0	65553 µg/L	65553 ppb	11:44:36
3	Si 251.611†	366720.4	361181.0	30295 µg/L	30295 ppb	11:44:36
3	Sn 189.927†	909.3	872.9	523.01 µg/L	523.01 ppb	11:45:02
3	Ti 334.940†	2014944.7	1985407.9	4950.8 µg/L	4950.8 ppb	11:44:36
3	Tl 190.801†	253.8	273.3	520.23 µg/L	520.23 ppb	11:45:02
3	U 409.014†	4055.9	4231.0	389.77 µg/L	389.77 ppb	11:44:36
3	V 292.402†	46094.1	45558.3	577.25 µg/L	577.25 ppb	11:44:41
3	Zn 213.857†	33619.2	32467.9	937.87 µg/L	937.87 ppb	11:44:41

Mean Data: 1202011896|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1964966.9	101.11	%	0.492				0.49%
Sc RADIAL	77871.9	101	%	0.6				0.60%
Y 371.029	1317572.4	107.22	%	0.502				0.47%
Ag 328.068†	56973.4	540.97	µg/L	8.319	540.97	ppb	8.319	1.54%
Al 396.153Radial†	62180.8	43196	µg/L	379.5	43196	ppb	379.5	0.88%
As 188.979†	243.1	564.91	µg/L	14.867	564.91	ppb	14.867	2.63%
B 249.677†	12139.8	541.46	µg/L	9.793	541.46	ppb	9.793	1.81%
Ba 233.527†	27233.0	792.25	µg/L	15.791	792.25	ppb	15.791	1.99%
Be 313.107†	792047.6	549.92	µg/L	5.784	549.92	ppb	5.784	1.05%
Ca 317.933Radial†	14231.4	11206	µg/L	110.0	11206	ppb	110.0	0.98%
Cd 226.502†	18763.5	542.07	µg/L	10.458	542.07	ppb	10.458	1.93%
Co 228.616†	9912.9	537.11	µg/L	12.120	537.11	ppb	12.120	2.26%
Cr 267.716†	27979.3	649.33	µg/L	16.718	649.33	ppb	16.718	2.57%
Cu 324.752†	75985.4	584.69	µg/L	13.092	584.69	ppb	13.092	2.24%
Fe 238.204 Radial†	6697.5	96164	µg/L	691.9	96164	ppb	691.9	0.72%
K 766.490 Radial†	16521.0	10967	µg/L	80.4	10967	ppb	80.4	0.73%
Mg 279.077 IEC†	1066.7	11531	µg/L	38.9	11531	ppb	38.9	0.34%
Mn 257.610†	882626.1	3273.0	µg/L	32.64	3273.0	ppb	32.64	1.00%
Mo 202.031†	4102.7	518.96	µg/L	20.978	518.96	ppb	20.978	4.04%
Na 589.592 Radial†	25160.2	7225.1	µg/L	68.34	7225.1	ppb	68.34	0.95%

Ni 231.604†	9506.6	599.57 µg/L	14.603	599.57 ppb	14.603	2.44%
P 214.914†	549.0	1196.4 µg/L	46.32	1196.4 ppb	46.32	3.87%
Pb 220.353†	2019.1	587.64 µg/L	16.857	587.64 ppb	16.857	2.87%
S 181.975 Axial†	966.3	5539.4 µg/L	130.75	5539.4 ppb	130.75	2.36%
Sb 206.836†	461.3	510.92 µg/L	18.934	510.92 ppb	18.934	3.71%
Se 196.026†	123.4	561.17 µg/L	10.782	561.17 ppb	10.782	1.92%
SiO2†	314067.3	66291 µg/L	641.7	66291 ppb	641.7	0.97%
Si 251.611†	365076.8	30621 µg/L	283.0	30621 ppb	283.0	0.92%
Sn 189.927†	920.3	550.72 µg/L	24.047	550.72 ppb	24.047	4.37%
Sr 421.552†	90202.9	573.14 µg/L	4.982	573.14 ppb	4.982	0.87%
Ti 334.940†	2012797.5	5019.1 µg/L	59.27	5019.1 ppb	59.27	1.18%
Tl 190.801†	286.0	542.72 µg/L	19.801	542.72 ppb	19.801	3.65%
U 409.014†	4274.1	393.83 µg/L	5.151	393.83 ppb	5.151	1.31%
V 292.402†	46764.3	592.50 µg/L	14.215	592.50 ppb	14.215	2.40%
Zn 213.857†	33145.5	957.51 µg/L	19.248	957.51 ppb	19.248	2.01%

Sequence No.: 38
Sample ID: 1202011898|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 332
Date Collected: 1/27/2010 11:45:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011898|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77870.2	77870.2	101	%			11:45:44
1	Al 396.153Radial†	61405.0	60604.5	42101	µg/L	42101	ppb	11:45:44
1	Ca 317.933Radial†	14294.0	13849.5	10905	µg/L	10905	ppb	11:46:04
1	Fe 238.204 Radial†	6593.1	6488.3	93160	µg/L	93160	ppb	11:46:04
1	K 766.490 Radial†	15951.5	15324.3	10173	µg/L	10173	ppb	11:45:44
1	Mg 279.077 IEC†	1023.7	1001.6	10824	µg/L	10824	ppb	11:46:04
1	Na 589.592 Radial†	24358.3	23484.8	6744.0	µg/L	6744.0	ppb	11:45:44
1	Sr 421.552†	88664.7	86910.8	552.22	µg/L	552.22	ppb	11:45:44
1	Sc 361.383	1970633.6	1970633.6	101.40	%			11:47:10
1	Y 371.029	1321179.7	1321179.7	107.52	%			11:47:10
1	Ag 328.068†	56544.0	55817.5	529.91	µg/L	529.91	ppb	11:47:15
1	As 188.979†	245.0	241.1	560.19	µg/L	560.19	ppb	11:47:36
1	B 249.677†	12244.3	11959.9	534.28	µg/L	534.28	ppb	11:47:15
1	Ba 233.527†	26283.6	25934.8	754.51	µg/L	754.51	ppb	11:47:15
1	Be 313.107†	790946.1	776173.5	538.91	µg/L	538.91	ppb	11:47:10
1	Cd 226.502†	18698.5	18575.5	536.87	µg/L	536.87	ppb	11:47:15
1	Co 228.616†	9872.1	9780.7	530.09	µg/L	530.09	ppb	11:47:15
1	Cr 267.716†	28518.5	28207.0	654.60	µg/L	654.60	ppb	11:47:15
1	Cu 324.752†	78824.6	74066.8	569.85	µg/L	569.85	ppb	11:47:15
1	Mn 257.610†	737542.8	727537.4	2699.6	µg/L	2699.6	ppb	11:47:10
1	Mo 202.031†	4143.4	4068.9	514.60	µg/L	514.60	ppb	11:47:36
1	Ni 231.604†	9938.0	9465.2	596.93	µg/L	596.93	ppb	11:47:15
1	P 214.914†	778.0	564.7	1237.5	µg/L	1237.5	ppb	11:47:36
1	Pb 220.353†	2102.3	2017.3	587.19	µg/L	587.19	ppb	11:47:36
1	S 181.975 Axial†	997.4	958.1	5492.3	µg/L	5492.3	ppb	11:47:36
1	Sb 206.836†	476.3	447.3	495.35	µg/L	495.35	ppb	11:47:36
1	Se 196.026†	143.4	129.0	558.68	µg/L	558.68	ppb	11:47:36
1	SiO2†	313450.2	306838.7	64765	µg/L	64765	ppb	11:47:10
1	Si 251.611†	362060.2	356751.0	29923	µg/L	29923	ppb	11:47:10
1	Sn 189.927†	942.1	905.6	541.68	µg/L	541.68	ppb	11:47:36
1	Ti 334.940†	1987474.2	1959228.0	4885.6	µg/L	4885.6	ppb	11:47:10
1	Tl 190.801†	264.7	284.2	536.28	µg/L	536.28	ppb	11:47:36
1	U 409.014†	3904.6	4083.6	376.08	µg/L	376.08	ppb	11:47:10
1	V 292.402†	46078.7	45563.9	577.37	µg/L	577.37	ppb	11:47:15
1	Zn 213.857†	33649.0	32512.5	939.27	µg/L	939.27	ppb	11:47:15
2	Sc RADIAL	78343.3	78343.3	102	%			11:46:10
2	Al 396.153Radial†	61827.3	60652.8	42134	µg/L	42134	ppb	11:46:10
2	Ca 317.933Radial†	14322.4	13792.2	10860	µg/L	10860	ppb	11:46:30
2	Fe 238.204 Radial†	6595.5	6451.3	92630	µg/L	92630	ppb	11:46:30
2	K 766.490 Radial†	16066.3	15341.8	10184	µg/L	10184	ppb	11:46:10
2	Mg 279.077 IEC†	1023.3	995.1	10754	µg/L	10754	ppb	11:46:30
2	Na 589.592 Radial†	24560.1	23537.5	6759.1	µg/L	6759.1	ppb	11:46:10
2	Sr 421.552†	89301.7	87007.2	552.84	µg/L	552.84	ppb	11:46:10
2	Sc 361.383	1972160.3	1972160.3	101.48	%			11:47:44
2	Y 371.029	1322670.9	1322670.9	107.64	%			11:47:44
2	Ag 328.068†	56561.6	55791.7	529.64	µg/L	529.64	ppb	11:47:50
2	As 188.979†	242.5	238.4	553.92	µg/L	553.92	ppb	11:48:10
2	B 249.677†	12261.9	11967.9	534.95	µg/L	534.95	ppb	11:47:50
2	Ba 233.527†	26167.2	25800.0	750.59	µg/L	750.59	ppb	11:47:50
2	Be 313.107†	787087.5	771767.4	535.85	µg/L	535.85	ppb	11:47:44
2	Cd 226.502†	18680.8	18543.8	536.00	µg/L	536.00	ppb	11:47:50
2	Co 228.616†	9918.0	9818.4	532.22	µg/L	532.22	ppb	11:47:50
2	Cr 267.716†	28433.0	28101.0	652.14	µg/L	652.14	ppb	11:47:50
2	Cu 324.752†	78883.1	74064.3	569.75	µg/L	569.75	ppb	11:47:50
2	Mn 257.610†	733411.8	722903.5	2682.5	µg/L	2682.5	ppb	11:47:44
2	Mo 202.031†	4129.4	4051.9	512.45	µg/L	512.45	ppb	11:48:10
2	Ni 231.604†	9950.6	9470.0	597.22	µg/L	597.22	ppb	11:47:50
2	P 214.914†	767.4	553.7	1211.7	µg/L	1211.7	ppb	11:48:10
2	Pb 220.353†	2068.3	1982.2	576.95	µg/L	576.95	ppb	11:48:10

2	S 181.975 Axial†	992.5	952.5	5459.8 µg/L	5459.8 ppb	11:48:10
2	Sb 206.836†	475.1	445.8	493.70 µg/L	493.70 ppb	11:48:10
2	Se 196.026†	143.7	129.1	556.91 µg/L	556.91 ppb	11:48:10
2	SiO2†	312037.7	305207.4	64421 µg/L	64421 ppb	11:47:44
2	Si 251.611†	360311.8	354751.7	29755 µg/L	29755 ppb	11:47:44
2	Sn 189.927†	945.7	908.5	543.28 µg/L	543.28 ppb	11:48:10
2	Ti 334.940†	1978207.1	1948578.7	4859.0 µg/L	4859.0 ppb	11:47:44
2	Tl 190.801†	269.5	288.7	543.81 µg/L	543.81 ppb	11:48:10
2	U 409.014†	4060.4	4234.1	390.52 µg/L	390.52 ppb	11:47:44
2	V 292.402†	46108.9	45558.5	577.27 µg/L	577.27 ppb	11:47:50
2	Zn 213.857†	33689.1	32526.3	939.70 µg/L	939.70 ppb	11:47:50
3	Sc RADIAL	77797.7	77797.7	101 %		11:46:36
3	Al 396.153Radial†	61195.1	60453.8	41997 µg/L	41997 ppb	11:46:36
3	Ca 317.933Radial†	14257.4	13826.5	10887 µg/L	10887 ppb	11:46:57
3	Fe 238.204 Radial†	6566.2	6467.8	92866 µg/L	92866 ppb	11:46:57
3	K 766.490 Radial†	15926.1	15313.9	10166 µg/L	10166 ppb	11:46:36
3	Mg 279.077 IEC†	1016.5	995.4	10757 µg/L	10757 ppb	11:46:57
3	Na 589.592 Radial†	24315.9	23465.3	6738.4 µg/L	6738.4 ppb	11:46:36
3	Sr 421.552†	88155.7	86489.8	549.55 µg/L	549.55 ppb	11:46:36
3	Sc 361.383	1975257.7	1975257.7	101.64 %		11:48:18
3	Y 371.029	1323070.1	1323070.1	107.67 %		11:48:18
3	Ag 328.068†	55818.2	54972.8	521.88 µg/L	521.88 ppb	11:48:24
3	As 188.979†	225.2	221.1	514.02 µg/L	514.02 ppb	11:48:44
3	B 249.677†	12018.6	11709.5	522.22 µg/L	522.22 ppb	11:48:24
3	Ba 233.527†	25465.5	25069.2	729.32 µg/L	729.32 ppb	11:48:24
3	Be 313.107†	773321.2	757006.9	525.60 µg/L	525.60 ppb	11:48:18
3	Cd 226.502†	18300.2	18140.4	524.08 µg/L	524.08 ppb	11:48:24
3	Co 228.616†	9592.7	9483.0	513.87 µg/L	513.87 ppb	11:48:24
3	Cr 267.716†	27424.4	27064.8	628.10 µg/L	628.10 ppb	11:48:24
3	Cu 324.752†	76701.1	71795.6	552.73 µg/L	552.73 ppb	11:48:24
3	Mn 257.610†	721578.7	710128.0	2635.3 µg/L	2635.3 ppb	11:48:18
3	Mo 202.031†	3797.0	3718.5	470.58 µg/L	470.58 ppb	11:48:44
3	Ni 231.604†	9623.9	9133.2	576.03 µg/L	576.03 ppb	11:48:24
3	P 214.914†	731.5	517.2	1125.2 µg/L	1125.2 ppb	11:48:44
3	Pb 220.353†	1946.0	1858.6	540.84 µg/L	540.84 ppb	11:48:44
3	S 181.975 Axial†	947.0	906.2	5194.6 µg/L	5194.6 ppb	11:48:44
3	Sb 206.836†	449.4	419.8	464.45 µg/L	464.45 ppb	11:48:44
3	Se 196.026†	138.3	123.6	549.10 µg/L	549.10 ppb	11:48:44
3	SiO2†	307717.8	300475.1	63422 µg/L	63422 ppb	11:48:18
3	Si 251.611†	355123.9	349090.7	29281 µg/L	29281 ppb	11:48:18
3	Sn 189.927†	864.4	827.1	495.79 µg/L	495.79 ppb	11:48:44
3	Ti 334.940†	1942459.3	1910350.9	4763.7 µg/L	4763.7 ppb	11:48:18
3	Tl 190.801†	246.9	266.0	503.70 µg/L	503.70 ppb	11:48:44
3	U 409.014†	3840.3	4011.3	369.22 µg/L	369.22 ppb	11:48:18
3	V 292.402†	44487.1	43891.6	556.15 µg/L	556.15 ppb	11:48:24
3	Zn 213.857†	32764.6	31564.7	911.78 µg/L	911.78 ppb	11:48:24

Mean Data: 1202011898|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1972683.8	101.51	%	0.121				0.12%
Sc RADIAL	78003.7	102	%	0.4				0.38%
Y 371.029	1322306.9	107.61	%	0.081				0.08%
Ag 328.068†	55527.3	527.14	µg/L	4.559	527.14	ppb	4.559	0.86%
Al 396.153Radial†	60570.4	42077	µg/L	71.7	42077	ppb	71.7	0.17%
As 188.979†	233.5	542.71	µg/L	25.040	542.71	ppb	25.040	4.61%
B 249.677†	11879.1	530.48	µg/L	7.166	530.48	ppb	7.166	1.35%
Ba 233.527†	25601.4	744.81	µg/L	13.553	744.81	ppb	13.553	1.82%
Be 313.107†	768315.9	533.45	µg/L	6.970	533.45	ppb	6.970	1.31%
Ca 317.933Radial†	13822.7	10884	µg/L	22.7	10884	ppb	22.7	0.21%
Cd 226.502†	18419.9	532.32	µg/L	7.148	532.32	ppb	7.148	1.34%
Co 228.616†	9694.0	525.39	µg/L	10.035	525.39	ppb	10.035	1.91%
Cr 267.716†	27791.0	644.95	µg/L	14.645	644.95	ppb	14.645	2.27%
Cu 324.752†	73308.9	564.11	µg/L	9.857	564.11	ppb	9.857	1.75%
Fe 238.204 Radial†	6469.1	92885	µg/L	265.7	92885	ppb	265.7	0.29%
K 766.490 Radial†	15326.7	10174	µg/L	9.4	10174	ppb	9.4	0.09%
Mg 279.077 IEC†	997.4	10779	µg/L	39.8	10779	ppb	39.8	0.37%
Mn 257.610†	720189.6	2672.5	µg/L	33.32	2672.5	ppb	33.32	1.25%
Mo 202.031†	3946.5	499.21	µg/L	24.816	499.21	ppb	24.816	4.97%
Na 589.592 Radial†	23495.9	6747.1	µg/L	10.72	6747.1	ppb	10.72	0.16%

Ni 231.604†	9356.1	590.06 µg/L	12.153	590.06 ppb	12.153	2.06%
P 214.914†	545.2	1191.5 µg/L	58.86	1191.5 ppb	58.86	4.94%
Pb 220.353†	1952.7	568.33 µg/L	24.348	568.33 ppb	24.348	4.28%
S 181.975 Axial†	938.9	5382.3 µg/L	163.30	5382.3 ppb	163.30	3.03%
Sb 206.836†	437.6	484.50 µg/L	17.380	484.50 ppb	17.380	3.59%
Se 196.026†	127.2	554.90 µg/L	5.099	554.90 ppb	5.099	0.92%
SiO2†	304173.7	64203 µg/L	697.7	64203 ppb	697.7	1.09%
Si 251.611†	353531.1	29653 µg/L	333.3	29653 ppb	333.3	1.12%
Sn 189.927†	880.4	526.92 µg/L	26.967	526.92 ppb	26.967	5.12%
Sr 421.552†	86802.6	551.54 µg/L	1.748	551.54 ppb	1.748	0.32%
Ti 334.940†	1939385.9	4836.1 µg/L	64.10	4836.1 ppb	64.10	1.33%
Tl 190.801†	279.6	527.93 µg/L	21.316	527.93 ppb	21.316	4.04%
U 409.014†	4109.7	378.61 µg/L	10.873	378.61 ppb	10.873	2.87%
V 292.402†	45004.6	570.26 µg/L	12.221	570.26 ppb	12.221	2.14%
Zn 213.857†	32201.2	930.25 µg/L	16.000	930.25 ppb	16.000	1.72%

Sequence No.: 39
Sample ID: 1202011897|940174|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 333
Date Collected: 1/27/2010 11:48:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011897|940174|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76783.8	76783.8	100.0	%			11:49:26
1	Al 396.153Radial†	6243.9	6274.8	4360.0	µg/L	4360.0	ppb	11:49:26
1	Ca 317.933Radial†	1532.7	1281.7	1009.3	µg/L	1009.3	ppb	11:49:46
1	Fe 238.204 Radial†	1153.8	1138.5	16345	µg/L	16345	ppb	11:49:46
1	K 766.490 Radial†	1428.4	1017.1	675.16	µg/L	675.16	ppb	11:49:26
1	Mg 279.077 IEC†	81.8	73.5	783.74	µg/L	783.74	ppb	11:49:46
1	Na 589.592 Radial†	936.5	392.0	112.58	µg/L	112.58	ppb	11:49:26
1	Sr 421.552†	1589.4	1032.5	6.5602	µg/L	6.5602	ppb	11:49:26
1	Sc 361.383	1963823.8	1963823.8	101.05	%			11:50:49
1	Y 371.029	1247917.6	1247917.6	101.56	%			11:50:49
1	Ag 328.068†	-207.1	-149.9	-0.3154	µg/L	-0.3154	ppb	11:50:54
1	As 188.979†	0.3	-0.3	0.2087	µg/L	0.2087	ppb	11:51:15
1	B 249.677†	301.3	183.0	0.4072	µg/L	0.4072	ppb	11:50:54
1	Ba 233.527†	1281.0	1282.2	37.266	µg/L	37.266	ppb	11:51:15
1	Be 313.107†	5593.0	1695.4	0.8901	µg/L	0.8901	ppb	11:50:54
1	Cd 226.502†	-69.9	66.3	0.1149	µg/L	0.1149	ppb	11:51:15
1	Co 228.616†	-4.3	40.8	0.6571	µg/L	0.6571	ppb	11:51:15
1	Cr 267.716†	852.8	926.7	21.499	µg/L	21.499	ppb	11:50:54
1	Cu 324.752†	3782.6	75.0	2.8361	µg/L	2.8361	ppb	11:50:54
1	Mn 257.610†	106153.3	105238.5	390.92	µg/L	390.92	ppb	11:50:54
1	Mo 202.031†	25.6	8.1	1.6398	µg/L	1.6398	ppb	11:51:15
1	Ni 231.604†	519.8	178.9	11.484	µg/L	11.484	ppb	11:51:15
1	P 214.914†	275.5	70.2	155.91	µg/L	155.91	ppb	11:51:15
1	Pb 220.353†	70.9	14.2	3.7986	µg/L	3.7986	ppb	11:51:15
1	S 181.975 Axial†	23.3	-2.5	-14.354	µg/L	-14.354	ppb	11:51:15
1	Sb 206.836†	31.3	8.5	9.1576	µg/L	9.1576	ppb	11:51:15
1	Se 196.026†	-36.1	-48.2	-13.611	µg/L	-13.611	ppb	11:51:15
1	SiO2†	49403.4	46610.7	9838.3	µg/L	9838.3	ppb	11:50:54
1	Si 251.611†	55437.5	54556.3	4576.0	µg/L	4576.0	ppb	11:50:54
1	Sn 189.927†	17.3	-6.3	-1.7992	µg/L	-1.7992	ppb	11:51:15
1	Ti 334.940†	310309.1	306307.2	763.88	µg/L	763.88	ppb	11:50:49
1	Tl 190.801†	-29.0	-5.6	-2.3236	µg/L	-2.3236	ppb	11:51:15
1	U 409.014†	-474.8	-236.9	-24.944	µg/L	-24.944	ppb	11:50:54
1	V 292.402†	519.2	635.9	8.8078	µg/L	8.8078	ppb	11:50:54
1	Zn 213.857†	3145.6	2441.6	70.307	µg/L	70.307	ppb	11:51:15
2	Sc RADIAL	76338.0	76338.0	99.4	%			11:49:52
2	Al 396.153Radial†	6143.4	6210.1	4315.0	µg/L	4315.0	ppb	11:49:52
2	Ca 317.933Radial†	1517.0	1274.9	1003.9	µg/L	1003.9	ppb	11:50:12
2	Fe 238.204 Radial†	1154.2	1145.6	16447	µg/L	16447	ppb	11:50:12
2	K 766.490 Radial†	1400.9	997.8	662.36	µg/L	662.36	ppb	11:49:52
2	Mg 279.077 IEC†	84.1	76.4	814.62	µg/L	814.62	ppb	11:50:12
2	Na 589.592 Radial†	941.8	402.8	115.67	µg/L	115.67	ppb	11:49:52
2	Sr 421.552†	1536.8	988.8	6.2826	µg/L	6.2826	ppb	11:49:52
2	Sc 361.383	1955555.3	1955555.3	100.63	%			11:51:21
2	Y 371.029	1242661.2	1242661.2	101.13	%			11:51:21
2	Ag 328.068†	-172.9	-116.8	0.0050	µg/L	0.0050	ppb	11:51:27
2	As 188.979†	-2.4	-3.0	-5.9903	µg/L	-5.9903	ppb	11:51:47
2	B 249.677†	311.1	194.0	0.8907	µg/L	0.8907	ppb	11:51:27
2	Ba 233.527†	1274.0	1280.6	37.222	µg/L	37.222	ppb	11:51:47
2	Be 313.107†	5636.9	1762.4	0.9373	µg/L	0.9373	ppb	11:51:27
2	Cd 226.502†	-58.3	77.5	0.4333	µg/L	0.4333	ppb	11:51:47
2	Co 228.616†	19.3	64.2	1.9509	µg/L	1.9509	ppb	11:51:47
2	Cr 267.716†	867.4	944.8	21.920	µg/L	21.920	ppb	11:51:27
2	Cu 324.752†	3832.6	140.6	3.3433	µg/L	3.3433	ppb	11:51:27
2	Mn 257.610†	106901.6	106426.2	395.32	µg/L	395.32	ppb	11:51:27
2	Mo 202.031†	31.8	14.4	2.4387	µg/L	2.4387	ppb	11:51:47
2	Ni 231.604†	513.2	174.6	11.209	µg/L	11.209	ppb	11:51:47
2	P 214.914†	264.6	60.5	132.50	µg/L	132.50	ppb	11:51:47
2	Pb 220.353†	83.5	27.1	7.5432	µg/L	7.5432	ppb	11:51:47

2	S 181.975 Axial†	25.3	-0.4	-2.3200 µg/L	-2.3200 ppb	11:51:47
2	Sb 206.836†	20.7	-1.8	-2.2983 µg/L	-2.2983 ppb	11:51:47
2	Se 196.026†	-28.7	-41.0	-1.8544 µg/L	-1.8544 ppb	11:51:47
2	SiO2†	49759.5	47171.2	9956.6 µg/L	9956.6 ppb	11:51:27
2	Si 251.611†	55743.4	55092.2	4621.0 µg/L	4621.0 ppb	11:51:27
2	Sn 189.927†	15.7	-7.8	-2.6705 µg/L	-2.6705 ppb	11:51:47
2	Ti 334.940†	308520.4	305828.1	762.68 µg/L	762.68 ppb	11:51:21
2	Tl 190.801†	-22.5	0.8	8.6462 µg/L	8.6462 ppb	11:51:47
2	U 409.014†	-553.2	-316.8	-32.575 µg/L	-32.575 ppb	11:51:27
2	V 292.402†	581.6	700.1	9.6100 µg/L	9.6100 ppb	11:51:27
2	Zn 213.857†	3119.7	2429.0	69.933 µg/L	69.933 ppb	11:51:47
3	Sc RADIAL	75983.3	75983.3	98.9 %		11:50:18
3	Al 396.153Radial†	6197.5	6293.6	4373.1 µg/L	4373.1 ppb	11:50:18
3	Ca 317.933Radial†	1522.4	1287.5	1013.8 µg/L	1013.8 ppb	11:50:38
3	Fe 238.204 Radial†	1152.9	1149.7	16506 µg/L	16506 ppb	11:50:38
3	K 766.490 Radial†	1454.5	1058.5	702.69 µg/L	702.69 ppb	11:50:18
3	Mg 279.077 IEC†	82.1	74.7	796.26 µg/L	796.26 ppb	11:50:38
3	Na 589.592 Radial†	957.3	423.0	121.46 µg/L	121.46 ppb	11:50:18
3	Sr 421.552†	1557.0	1016.5	6.4585 µg/L	6.4585 ppb	11:50:18
3	Sc 361.383	1965944.3	1965944.3	101.16 %		11:51:53
3	Y 371.029	1249456.6	1249456.6	101.68 %		11:51:53
3	Ag 328.068†	-247.7	-189.8	-0.6761 µg/L	-0.6761 ppb	11:51:59
3	As 188.979†	0.7	0.1	1.1919 µg/L	1.1919 ppb	11:52:20
3	B 249.677†	291.2	172.6	-0.1827 µg/L	-0.1827 ppb	11:51:59
3	Ba 233.527†	1160.5	1161.7	33.765 µg/L	33.765 ppb	11:52:20
3	Be 313.107†	5596.3	1692.7	0.8951 µg/L	0.8951 ppb	11:51:59
3	Cd 226.502†	-78.2	58.2	-0.1425 µg/L	-0.1425 ppb	11:52:20
3	Co 228.616†	1.6	46.6	1.0141 µg/L	1.0141 ppb	11:52:20
3	Cr 267.716†	807.2	880.7	20.432 µg/L	20.432 ppb	11:51:59
3	Cu 324.752†	3801.1	89.3	2.9656 µg/L	2.9656 ppb	11:51:59
3	Mn 257.610†	101593.0	100617.1	373.87 µg/L	373.87 ppb	11:51:59
3	Mo 202.031†	22.1	4.7	1.2122 µg/L	1.2122 ppb	11:52:20
3	Ni 231.604†	499.1	157.9	10.161 µg/L	10.161 ppb	11:52:20
3	P 214.914†	258.3	52.9	114.32 µg/L	114.32 ppb	11:52:20
3	Pb 220.353†	82.2	25.4	7.0459 µg/L	7.0459 ppb	11:52:20
3	S 181.975 Axial†	27.9	2.1	11.819 µg/L	11.819 ppb	11:52:20
3	Sb 206.836†	24.5	1.8	1.6977 µg/L	1.6977 ppb	11:52:20
3	Se 196.026†	-22.8	-35.0	7.8085 µg/L	7.8085 ppb	11:52:20
3	SiO2†	47842.1	45014.6	9501.4 µg/L	9501.4 ppb	11:51:59
3	Si 251.611†	53598.5	52679.2	4418.6 µg/L	4418.6 ppb	11:51:59
3	Sn 189.927†	18.4	-5.3	-1.1719 µg/L	-1.1719 ppb	11:52:20
3	Ti 334.940†	303343.8	299090.6	745.88 µg/L	745.88 ppb	11:51:53
3	Tl 190.801†	-28.3	-4.9	-1.3561 µg/L	-1.3561 ppb	11:52:20
3	U 409.014†	-556.7	-317.3	-32.639 µg/L	-32.639 ppb	11:51:59
3	V 292.402†	527.7	643.8	8.9005 µg/L	8.9005 ppb	11:51:59
3	Zn 213.857†	2838.0	2134.1	61.341 µg/L	61.341 ppb	11:52:20

Mean Data: 1202011897|940174|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1961774.5	100.95	%	0.282				0.28%
Sc RADIAL	76368.4	99.4	%	0.52				0.53%
Y 371.029	1246678.4	101.46	%	0.290				0.29%
Ag 328.068†	-152.1	-0.3289	µg/L	0.34076	-0.3289	ppb	0.34076	103.62%
Al 396.153Radial†	6259.5	4349.4	µg/L	30.46	4349.4	ppb	30.46	0.70%
As 188.979†	-1.1	-1.5299	µg/L	3.89398	-1.5299	ppb	3.89398	254.53%
B 249.677†	183.2	0.3718	µg/L	0.53757	0.3718	ppb	0.53757	144.60%
Ba 233.527†	1241.5	36.084	µg/L	2.0086	36.084	ppb	2.0086	5.57%
Be 313.107†	1716.8	0.9075	µg/L	0.02591	0.9075	ppb	0.02591	2.85%
Ca 317.933Radial†	1281.4	1009.0	µg/L	4.95	1009.0	ppb	4.95	0.49%
Cd 226.502†	67.3	0.1352	µg/L	0.28846	0.1352	ppb	0.28846	213.29%
Co 228.616†	50.5	1.2074	µg/L	0.66824	1.2074	ppb	0.66824	55.35%
Cr 267.716†	917.4	21.284	µg/L	0.7669	21.284	ppb	0.7669	3.60%
Cu 324.752†	101.6	3.0483	µg/L	0.26353	3.0483	ppb	0.26353	8.65%
Fe 238.204 Radial†	1144.6	16433	µg/L	81.6	16433	ppb	81.6	0.50%
K 766.490 Radial†	1024.5	680.07	µg/L	20.605	680.07	ppb	20.605	3.03%
Mg 279.077 IEC†	74.9	798.20	µg/L	15.530	798.20	ppb	15.530	1.95%
Mn 257.610†	104093.9	386.70	µg/L	11.331	386.70	ppb	11.331	2.93%
Mo 202.031†	9.1	1.7636	µg/L	0.62255	1.7636	ppb	0.62255	35.30%
Na 589.592 Radial†	405.9	116.57	µg/L	4.508	116.57	ppb	4.508	3.87%

Ni 231.604†	170.5	10.951	µg/L	0.6981	10.951	ppb	0.6981	6.37%
P 214.914†	61.2	134.24	µg/L	20.854	134.24	ppb	20.854	15.53%
Pb 220.353†	22.2	6.1292	µg/L	2.03366	6.1292	ppb	2.03366	33.18%
S 181.975 Axial†	-0.3	-1.6183	µg/L	13.10067	-1.6183	ppb	13.10067	809.52%
Sb 206.836†	2.8	2.8523	µg/L	5.81456	2.8523	ppb	5.81456	203.85%
Se 196.026†	-41.4	-2.5522	µg/L	10.72668	-2.5522	ppb	10.72668	420.28%
SiO2†	46265.5	9765.4	µg/L	236.19	9765.4	ppb	236.19	2.42%
Si 251.611†	54109.2	4538.5	µg/L	106.28	4538.5	ppb	106.28	2.34%
Sn 189.927†	-6.5	-1.8805	µg/L	0.75262	-1.8805	ppb	0.75262	40.02%
Sr 421.552†	1012.6	6.4337	µg/L	0.14045	6.4337	ppb	0.14045	2.18%
Ti 334.940†	303742.0	757.48	µg/L	10.064	757.48	ppb	10.064	1.33%
Tl 190.801†	-3.3	1.6555	µg/L	6.07343	1.6555	ppb	6.07343	366.86%
U 409.014†	-290.3	-30.053	µg/L	4.4243	-30.053	ppb	4.4243	14.72%
V 292.402†	659.9	9.1061	µg/L	0.43886	9.1061	ppb	0.43886	4.82%
Zn 213.857†	2334.9	67.194	µg/L	5.0723	67.194	ppb	5.0723	7.55%

Sequence No.: 40
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 11:52:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77967.3	77967.3	101	%			11:53:08
1	Al 396.153Radial†	7523.3	7440.5	5159.3	µg/L	5159.3	ppb	11:53:08
1	Ca 317.933Radial†	6965.4	6611.2	5205.8	µg/L	5205.8	ppb	11:53:08
1	Fe 238.204 Radial†	387.7	366.1	5266.8	µg/L	5266.8	ppb	11:53:28
1	K 766.490 Radial†	8294.2	7760.1	5151.4	µg/L	5151.4	ppb	11:53:08
1	Mg 279.077 IEC†	495.6	480.0	5234.9	µg/L	5234.9	ppb	11:53:28
1	Na 589.592 Radial†	36463.5	35381.8	10160	µg/L	10160	ppb	11:53:08
1	Sr 421.552†	82070.7	80305.0	510.25	µg/L	510.25	ppb	11:53:08
1	Sc 361.383	1966865.6	1966865.6	101.21	%			11:54:31
1	Y 371.029	1239244.0	1239244.0	100.85	%			11:54:31
1	Ag 328.068†	56109.7	55495.2	521.08	µg/L	521.08	ppb	11:54:37
1	As 188.979†	234.9	231.6	533.35	µg/L	533.35	ppb	11:54:57
1	B 249.677†	10748.5	10505.0	509.16	µg/L	509.16	ppb	11:54:37
1	Ba 233.527†	18142.5	17940.5	522.17	µg/L	522.17	ppb	11:54:37
1	Be 313.107†	755986.4	743125.3	517.55	µg/L	517.55	ppb	11:54:31
1	Cd 226.502†	17751.7	17675.3	520.24	µg/L	520.24	ppb	11:54:37
1	Co 228.616†	9574.5	9505.2	524.01	µg/L	524.01	ppb	11:54:37
1	Cr 267.716†	22854.0	22664.1	526.01	µg/L	526.01	ppb	11:54:37
1	Cu 324.752†	73628.8	69082.0	520.15	µg/L	520.15	ppb	11:54:37
1	Mn 257.610†	140490.6	139003.5	514.00	µg/L	514.00	ppb	11:54:37
1	Mo 202.031†	4213.5	4146.0	520.95	µg/L	520.95	ppb	11:54:57
1	Ni 231.604†	8756.3	8316.4	523.42	µg/L	523.42	ppb	11:54:37
1	P 214.914†	1325.8	1107.5	2601.8	µg/L	2601.8	ppb	11:54:57
1	Pb 220.353†	1900.1	1821.5	531.36	µg/L	531.36	ppb	11:54:57
1	S 181.975 Axial†	207.9	179.9	1031.0	µg/L	1031.0	ppb	11:54:57
1	Sb 206.836†	512.1	483.6	537.52	µg/L	537.52	ppb	11:54:57
1	Se 196.026†	345.6	329.1	539.15	µg/L	539.15	ppb	11:54:57
1	SiO2†	29192.3	26565.1	5607.2	µg/L	5607.2	ppb	11:54:37
1	Si 251.611†	32025.7	31339.0	2628.6	µg/L	2628.6	ppb	11:54:37
1	Sn 189.927†	958.3	923.5	541.66	µg/L	541.66	ppb	11:54:57
1	Ti 334.940†	211079.7	207787.1	517.89	µg/L	517.89	ppb	11:54:31
1	Tl 190.801†	283.6	303.3	526.99	µg/L	526.99	ppb	11:54:57
1	U 409.014†	5276.2	5446.2	518.67	µg/L	518.67	ppb	11:54:37
1	V 292.402†	42409.8	42025.9	528.63	µg/L	528.63	ppb	11:54:37
1	Zn 213.857†	18775.8	17880.4	517.58	µg/L	517.58	ppb	11:54:37
2	Sc RADIAL	78375.4	78375.4	102	%			11:53:34
2	Al 396.153Radial†	7589.9	7467.2	5177.8	µg/L	5177.8	ppb	11:53:34
2	Ca 317.933Radial†	7018.6	6627.6	5218.7	µg/L	5218.7	ppb	11:53:34
2	Fe 238.204 Radial†	386.2	362.7	5218.1	µg/L	5218.1	ppb	11:53:54
2	K 766.490 Radial†	8275.4	7699.1	5111.0	µg/L	5111.0	ppb	11:53:34
2	Mg 279.077 IEC†	498.4	480.2	5236.3	µg/L	5236.3	ppb	11:53:54
2	Na 589.592 Radial†	36661.5	35388.8	10162	µg/L	10162	ppb	11:53:34
2	Sr 421.552†	82482.2	80287.3	510.14	µg/L	510.14	ppb	11:53:34
2	Sc 361.383	1962513.3	1962513.3	100.98	%			11:55:04
2	Y 371.029	1237031.0	1237031.0	100.67	%			11:55:04
2	Ag 328.068†	56212.6	55720.0	523.19	µg/L	523.19	ppb	11:55:10
2	As 188.979†	233.0	230.2	530.25	µg/L	530.25	ppb	11:55:30
2	B 249.677†	10822.4	10601.7	513.90	µg/L	513.90	ppb	11:55:10
2	Ba 233.527†	18191.5	18028.8	524.74	µg/L	524.74	ppb	11:55:10
2	Be 313.107†	753509.5	742329.1	516.99	µg/L	516.99	ppb	11:55:04
2	Cd 226.502†	17822.3	17784.1	523.45	µg/L	523.45	ppb	11:55:10
2	Co 228.616†	9549.2	9501.2	523.79	µg/L	523.79	ppb	11:55:10
2	Cr 267.716†	22876.5	22736.4	527.69	µg/L	527.69	ppb	11:55:10
2	Cu 324.752†	73993.5	69604.5	524.07	µg/L	524.07	ppb	11:55:10
2	Mn 257.610†	140932.6	139749.1	516.75	µg/L	516.75	ppb	11:55:10
2	Mo 202.031†	4227.6	4169.2	523.86	µg/L	523.86	ppb	11:55:30
2	Ni 231.604†	8781.4	8360.5	526.20	µg/L	526.20	ppb	11:55:10
2	P 214.914†	1330.9	1115.5	2620.5	µg/L	2620.5	ppb	11:55:30
2	Pb 220.353†	1911.8	1837.3	535.96	µg/L	535.96	ppb	11:55:30

2	S 181.975 Axial†	210.6	183.0	1049.2 µg/L	1049.2 ppb	11:55:30
2	Sb 206.836†	514.5	487.1	541.43 µg/L	541.43 ppb	11:55:30
2	Se 196.026†	337.8	322.1	527.95 µg/L	527.95 ppb	11:55:30
2	SiO2†	29288.3	26724.2	5640.8 µg/L	5640.8 ppb	11:55:10
2	Si 251.611†	32052.0	31435.2	2636.7 µg/L	2636.7 ppb	11:55:10
2	Sn 189.927†	944.2	911.6	534.73 µg/L	534.73 ppb	11:55:30
2	Ti 334.940†	210643.7	207817.9	517.96 µg/L	517.96 ppb	11:55:04
2	Tl 190.801†	284.6	304.9	529.64 µg/L	529.64 ppb	11:55:30
2	U 409.014†	5329.8	5510.9	524.85 µg/L	524.85 ppb	11:55:10
2	V 292.402†	42529.4	42237.2	531.29 µg/L	531.29 ppb	11:55:10
2	Zn 213.857†	18867.4	18012.3	521.40 µg/L	521.40 ppb	11:55:10
3	Sc RADIAL	77385.1	77385.1	101 %		11:54:00
3	Al 396.153Radial†	7493.1	7466.3	5178.5 µg/L	5178.5 ppb	11:54:00
3	Ca 317.933Radial†	6894.2	6592.2	5190.8 µg/L	5190.8 ppb	11:54:00
3	Fe 238.204 Radial†	389.0	370.3	5326.6 µg/L	5326.6 ppb	11:54:20
3	K 766.490 Radial†	8209.7	7737.8	5136.6 µg/L	5136.6 ppb	11:54:00
3	Mg 279.077 IEC†	497.7	485.7	5295.7 µg/L	5295.7 ppb	11:54:20
3	Na 589.592 Radial†	36176.3	35367.1	10156 µg/L	10156 ppb	11:54:00
3	Sr 421.552†	81334.6	80182.7	509.47 µg/L	509.47 ppb	11:54:00
3	Sc 361.383	1964137.6	1964137.6	101.07 %		11:55:37
3	Y 371.029	1236096.3	1236096.3	100.59 %		11:55:37
3	Ag 328.068†	55074.4	54547.8	512.10 µg/L	512.10 ppb	11:55:43
3	As 188.979†	210.1	207.3	477.59 µg/L	477.59 ppb	11:56:03
3	B 249.677†	10574.2	10347.3	501.41 µg/L	501.41 ppb	11:55:43
3	Ba 233.527†	17484.5	17314.4	503.94 µg/L	503.94 ppb	11:55:43
3	Be 313.107†	733635.6	722048.0	502.87 µg/L	502.87 ppb	11:55:37
3	Cd 226.502†	17106.9	17061.7	502.15 µg/L	502.15 ppb	11:55:43
3	Co 228.616†	9136.4	9084.9	500.79 µg/L	500.79 ppb	11:55:43
3	Cr 267.716†	21503.7	21359.4	495.73 µg/L	495.73 ppb	11:55:43
3	Cu 324.752†	70935.8	66518.4	500.88 µg/L	500.88 ppb	11:55:43
3	Mn 257.610†	134533.1	133301.7	492.94 µg/L	492.94 ppb	11:55:43
3	Mo 202.031†	3744.8	3688.0	463.42 µg/L	463.42 ppb	11:56:03
3	Ni 231.604†	8392.8	7968.7	501.55 µg/L	501.55 ppb	11:55:43
3	P 214.914†	1220.9	1005.6	2358.8 µg/L	2358.8 ppb	11:56:03
3	Pb 220.353†	1746.4	1672.1	487.67 µg/L	487.67 ppb	11:56:03
3	S 181.975 Axial†	195.2	167.6	961.00 µg/L	961.00 ppb	11:56:03
3	Sb 206.836†	468.3	441.0	489.73 µg/L	489.73 ppb	11:56:03
3	Se 196.026†	314.4	298.6	491.26 µg/L	491.26 ppb	11:56:03
3	SiO2†	28407.5	25828.7	5451.7 µg/L	5451.7 ppb	11:55:43
3	Si 251.611†	31068.2	30435.6	2552.8 µg/L	2552.8 ppb	11:55:43
3	Sn 189.927†	835.2	802.9	471.32 µg/L	471.32 ppb	11:56:03
3	Ti 334.940†	204654.1	201719.0	502.75 µg/L	502.75 ppb	11:55:37
3	Tl 190.801†	268.3	288.5	501.32 µg/L	501.32 ppb	11:56:03
3	U 409.014†	5036.3	5216.1	496.71 µg/L	496.71 ppb	11:55:43
3	V 292.402†	40450.1	40145.0	504.71 µg/L	504.71 ppb	11:55:43
3	Zn 213.857†	18044.1	17182.2	497.34 µg/L	497.34 ppb	11:55:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1964505.5	101.09	%	0.113				0.11%
Sc RADIAL	77909.3	101	%	0.6				0.64%
Y 371.029	1237457.1	100.70	%	0.132				0.13%
Ag 328.068†	55254.3	518.79	µg/L	5.890	518.79	ppb	5.890	1.14%
QC value within limits for Ag 328.068 Recovery = 103.76%								
Al 396.153Radial†	7458.0	5171.9	µg/L	10.87	5171.9	ppb	10.87	0.21%
QC value within limits for Al 396.153Radial Recovery = 103.44%								
As 188.979†	223.0	513.73	µg/L	31.333	513.73	ppb	31.333	6.10%
QC value within limits for As 188.979 Recovery = 102.75%								
B 249.677†	10484.7	508.16	µg/L	6.303	508.16	ppb	6.303	1.24%
QC value within limits for B 249.677 Recovery = 101.63%								
Ba 233.527†	17761.2	516.95	µg/L	11.342	516.95	ppb	11.342	2.19%
QC value within limits for Ba 233.527 Recovery = 103.39%								
Be 313.107†	735834.2	512.47	µg/L	8.319	512.47	ppb	8.319	1.62%
QC value within limits for Be 313.107 Recovery = 102.49%								
Ca 317.933Radial†	6610.3	5205.1	µg/L	13.95	5205.1	ppb	13.95	0.27%
QC value within limits for Ca 317.933Radial Recovery = 104.10%								
Cd 226.502†	17507.0	515.28	µg/L	11.485	515.28	ppb	11.485	2.23%
QC value within limits for Cd 226.502 Recovery = 103.06%								
Co 228.616†	9363.8	516.19	µg/L	13.342	516.19	ppb	13.342	2.58%

QC value within limits for Co 228.616 Recovery = 103.24%

Cr 267.716†	22253.3	516.48 µg/L	17.984	516.48 ppb	17.984	3.48%

QC value within limits for Cr 267.716 Recovery = 103.30%

Cu 324.752†	68401.6	515.03 µg/L	12.412	515.03 ppb	12.412	2.41%

QC value within limits for Cu 324.752 Recovery = 103.01%

Fe 238.204 Radial†	366.4	5270.5 µg/L	54.34	5270.5 ppb	54.34	1.03%

QC value within limits for Fe 238.204 Radial Recovery = 105.41%

K 766.490 Radial†	7732.3	5133.0 µg/L	20.48	5133.0 ppb	20.48	0.40%

QC value within limits for K 766.490 Radial Recovery = 102.66%

Mg 279.077 IEC†	482.0	5255.6 µg/L	34.70	5255.6 ppb	34.70	0.66%

QC value within limits for Mg 279.077 IEC Recovery = 105.11%

Mn 257.610†	137351.4	507.90 µg/L	13.024	507.90 ppb	13.024	2.56%

QC value within limits for Mn 257.610 Recovery = 101.58%

Mo 202.031†	4001.1	502.74 µg/L	34.084	502.74 ppb	34.084	6.78%

QC value within limits for Mo 202.031 Recovery = 100.55%

Na 589.592 Radial†	35379.2	10160 µg/L	3.2	10160 ppb	3.2	0.03%

QC value within limits for Na 589.592 Radial Recovery = 101.60%

Ni 231.604†	8215.2	517.06 µg/L	13.503	517.06 ppb	13.503	2.61%

QC value within limits for Ni 231.604 Recovery = 103.41%

P 214.914†	1076.2	2527.0 µg/L	146.00	2527.0 ppb	146.00	5.78%

QC value within limits for P 214.914 Recovery = 101.08%

Pb 220.353†	1777.0	518.33 µg/L	26.651	518.33 ppb	26.651	5.14%

QC value within limits for Pb 220.353 Recovery = 103.67%

S 181.975 Axial†	176.8	1013.7 µg/L	46.56	1013.7 ppb	46.56	4.59%

QC value within limits for S 181.975 Axial Recovery = 101.37%

Sb 206.836†	470.6	522.89 µg/L	28.787	522.89 ppb	28.787	5.51%

QC value within limits for Sb 206.836 Recovery = 104.58%

Se 196.026†	316.6	519.45 µg/L	25.052	519.45 ppb	25.052	4.82%

QC value within limits for Se 196.026 Recovery = 103.89%

SiO2†	26372.7	5566.6 µg/L	100.84	5566.6 ppb	100.84	1.81%

QC value within limits for SiO2 Recovery = 104.10%

Si 251.611†	31069.9	2606.0 µg/L	46.26	2606.0 ppb	46.26	1.78%

QC value within limits for Si 251.611 Recovery = 104.24%

Sn 189.927†	879.3	515.90 µg/L	38.765	515.90 ppb	38.765	7.51%

QC value within limits for Sn 189.927 Recovery = 103.18%

Sr 421.552†	80258.3	509.95 µg/L	0.420	509.95 ppb	0.420	0.08%

QC value within limits for Sr 421.552 Recovery = 101.99%

Ti 334.940†	205774.7	512.87 µg/L	8.763	512.87 ppb	8.763	1.71%

QC value within limits for Ti 334.940 Recovery = 102.57%

Tl 190.801†	298.9	519.31 µg/L	15.642	519.31 ppb	15.642	3.01%

QC value within limits for Tl 190.801 Recovery = 103.86%

U 409.014†	5391.1	513.41 µg/L	14.791	513.41 ppb	14.791	2.88%

QC value within limits for U 409.014 Recovery = 102.68%

V 292.402†	41469.4	521.54 µg/L	14.639	521.54 ppb	14.639	2.81%

QC value within limits for V 292.402 Recovery = 104.31%

Zn 213.857†	17691.6	512.11 µg/L	12.930	512.11 ppb	12.930	2.52%

QC value within limits for Zn 213.857 Recovery = 102.42%

All analyte(s) passed QC.

Sequence No.: 41
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 11:56:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76080.7	76080.7	99.0	%			11:56:45
1	Al 396.153Radial†	-38.4	-10.9	-7.5614	µg/L	-7.5614	ppb	11:56:45
1	Ca 317.933Radial†	247.9	-1.3	-1.0343	µg/L	-1.0343	ppb	11:57:05
1	Fe 238.204 Radial†	18.1	2.4	34.068	µg/L	34.068	ppb	11:57:05
1	K 766.490 Radial†	370.9	-37.5	-24.900	µg/L	-24.900	ppb	11:56:45
1	Mg 279.077 IEC†	11.1	2.9	31.833	µg/L	31.833	ppb	11:57:05
1	Na 589.592 Radial†	339.6	-202.1	-58.025	µg/L	-58.025	ppb	11:56:45
1	Sr 421.552†	552.5	0.2	0.0012	µg/L	0.0012	ppb	11:56:45
1	Sc 361.383	1944233.2	1944233.2	100.04	%			11:58:07
1	Y 371.029	1229233.5	1229233.5	100.04	%			11:58:07
1	Ag 328.068†	-46.6	8.5	0.0858	µg/L	0.0858	ppb	11:58:13
1	As 188.979†	-2.2	-2.8	-6.4528	µg/L	-6.4528	ppb	11:58:33
1	B 249.677†	133.5	18.2	0.8687	µg/L	0.8687	ppb	11:58:33
1	Ba 233.527†	-15.8	-1.3	-0.0359	µg/L	-0.0359	ppb	11:58:33
1	Be 313.107†	3941.7	100.6	0.0700	µg/L	0.0700	ppb	11:58:13
1	Cd 226.502†	-127.0	8.5	0.2470	µg/L	0.2470	ppb	11:58:33
1	Co 228.616†	-44.2	0.8	0.0468	µg/L	0.0468	ppb	11:58:33
1	Cr 267.716†	-81.5	1.4	0.0319	µg/L	0.0319	ppb	11:58:13
1	Cu 324.752†	3686.1	16.3	0.1271	µg/L	0.1271	ppb	11:58:13
1	Mn 257.610†	-161.8	27.7	0.1057	µg/L	0.1057	ppb	11:58:33
1	Mo 202.031†	20.2	3.0	0.3720	µg/L	0.3720	ppb	11:58:33
1	Ni 231.604†	343.1	7.6	0.4779	µg/L	0.4779	ppb	11:58:33
1	P 214.914†	207.7	5.1	12.263	µg/L	12.263	ppb	11:58:33
1	Pb 220.353†	59.4	3.4	0.9890	µg/L	0.9890	ppb	11:58:33
1	S 181.975 Axial†	25.3	-0.2	-1.1294	µg/L	-1.1294	ppb	11:58:33
1	Sb 206.836†	20.9	-1.5	-1.6425	µg/L	-1.6425	ppb	11:58:33
1	Se 196.026†	0.7	-11.7	-18.404	µg/L	-18.404	ppb	11:58:33
1	SiO2†	2259.5	-20.2	-4.2726	µg/L	-4.2726	ppb	11:58:13
1	Si 251.611†	347.1	42.4	3.5580	µg/L	3.5580	ppb	11:58:33
1	Sn 189.927†	27.8	4.4	2.5517	µg/L	2.5517	ppb	11:58:33
1	Ti 334.940†	832.2	58.2	0.1427	µg/L	0.1427	ppb	11:58:13
1	Tl 190.801†	-25.7	-2.6	-4.4829	µg/L	-4.4829	ppb	11:58:33
1	U 409.014†	-177.5	55.6	5.2995	µg/L	5.2995	ppb	11:58:13
1	V 292.402†	-69.2	53.0	0.6692	µg/L	0.6692	ppb	11:58:13
1	Zn 213.857†	689.1	17.5	0.5033	µg/L	0.5033	ppb	11:58:33
2	Sc RADIAL	75624.6	75624.6	98.4	%			11:57:11
2	Al 396.153Radial†	-28.9	-1.5	-1.0125	µg/L	-1.0125	ppb	11:57:11
2	Ca 317.933Radial†	248.4	0.7	0.5418	µg/L	0.5418	ppb	11:57:31
2	Fe 238.204 Radial†	16.4	0.8	10.906	µg/L	10.906	ppb	11:57:31
2	K 766.490 Radial†	411.7	6.2	4.1481	µg/L	4.1481	ppb	11:57:11
2	Mg 279.077 IEC†	8.8	0.6	6.7423	µg/L	6.7423	ppb	11:57:31
2	Na 589.592 Radial†	320.9	-219.0	-62.879	µg/L	-62.879	ppb	11:57:11
2	Sr 421.552†	573.4	24.8	0.1577	µg/L	0.1577	ppb	11:57:11
2	Sc 361.383	1935956.5	1935956.5	99.617	%			11:58:39
2	Y 371.029	1224866.6	1224866.6	99.680	%			11:58:39
2	Ag 328.068†	-70.8	-15.9	-0.1499	µg/L	-0.1499	ppb	11:58:45
2	As 188.979†	-2.2	-2.8	-6.4400	µg/L	-6.4400	ppb	11:59:05
2	B 249.677†	126.0	11.3	0.5442	µg/L	0.5442	ppb	11:59:05
2	Ba 233.527†	-15.3	-0.8	-0.0247	µg/L	-0.0247	ppb	11:59:05
2	Be 313.107†	3920.9	96.6	0.0671	µg/L	0.0671	ppb	11:58:45
2	Cd 226.502†	-130.7	4.2	0.1237	µg/L	0.1237	ppb	11:59:05
2	Co 228.616†	-43.6	1.2	0.0652	µg/L	0.0652	ppb	11:59:05
2	Cr 267.716†	-94.2	-11.7	-0.2720	µg/L	-0.2720	ppb	11:58:45
2	Cu 324.752†	3712.9	59.0	0.4449	µg/L	0.4449	ppb	11:58:45
2	Mn 257.610†	-161.3	27.6	0.1032	µg/L	0.1032	ppb	11:59:05
2	Mo 202.031†	18.8	1.7	0.2088	µg/L	0.2088	ppb	11:59:05
2	Ni 231.604†	347.6	13.5	0.8511	µg/L	0.8511	ppb	11:59:05
2	P 214.914†	214.8	13.2	31.427	µg/L	31.427	ppb	11:59:05
2	Pb 220.353†	57.6	1.9	0.5557	µg/L	0.5557	ppb	11:59:05

2	S 181.975 Axial†	25.3	-0.1	-0.5581 µg/L	-0.5581 ppb	11:59:05
2	Sb 206.836†	32.4	10.1	11.214 µg/L	11.214 ppb	11:59:05
2	Se 196.026†	10.6	-1.8	-2.8201 µg/L	-2.8201 ppb	11:59:05
2	SiO2†	2296.7	26.8	5.6524 µg/L	5.6524 ppb	11:58:45
2	Si 251.611†	336.5	33.3	2.7960 µg/L	2.7960 ppb	11:59:05
2	Sn 189.927†	21.5	-1.8	-1.0616 µg/L	-1.0616 ppb	11:59:05
2	Ti 334.940†	920.0	149.9	0.3733 µg/L	0.3733 ppb	11:58:45
2	Tl 190.801†	-25.5	-2.6	-4.3981 µg/L	-4.3981 ppb	11:59:05
2	U 409.014†	-259.6	-27.7	-2.6409 µg/L	-2.6409 ppb	11:58:45
2	V 292.402†	-147.0	-25.4	-0.3175 µg/L	-0.3175 ppb	11:58:45
2	Zn 213.857†	674.3	5.6	0.1586 µg/L	0.1586 ppb	11:59:05
3	Sc RADIAL	76825.9	76825.9	100 %		11:57:37
3	Al 396.153Radial†	-21.5	6.5	4.4613 µg/L	4.4613 ppb	11:57:37
3	Ca 317.933Radial†	254.0	2.3	1.8074 µg/L	1.8074 ppb	11:57:57
3	Fe 238.204 Radial†	19.8	4.0	56.996 µg/L	56.996 ppb	11:57:57
3	K 766.490 Radial†	462.0	50.0	33.199 µg/L	33.199 ppb	11:57:37
3	Mg 279.077 IEC†	10.4	2.1	22.902 µg/L	22.902 ppb	11:57:57
3	Na 589.592 Radial†	371.3	-173.6	-49.853 µg/L	-49.853 ppb	11:57:37
3	Sr 421.552†	568.1	10.4	0.0658 µg/L	0.0658 ppb	11:57:37
3	Sc 361.383	1942016.4	1942016.4	99.929 %		11:59:11
3	Y 371.029	1227445.9	1227445.9	99.890 %		11:59:11
3	Ag 328.068†	-47.8	7.2	0.0733 µg/L	0.0733 ppb	11:59:17
3	As 188.979†	3.2	2.7	6.1471 µg/L	6.1471 ppb	11:59:37
3	B 249.677†	119.5	4.4	0.1853 µg/L	0.1853 ppb	11:59:37
3	Ba 233.527†	-13.8	0.7	0.0221 µg/L	0.0221 ppb	11:59:37
3	Be 313.107†	3988.2	151.6	0.1056 µg/L	0.1056 ppb	11:59:17
3	Cd 226.502†	-122.5	12.8	0.3715 µg/L	0.3715 ppb	11:59:37
3	Co 228.616†	-40.9	4.1	0.2266 µg/L	0.2266 ppb	11:59:37
3	Cr 267.716†	-68.4	14.3	0.3325 µg/L	0.3325 ppb	11:59:17
3	Cu 324.752†	3642.7	-22.9	-0.1646 µg/L	-0.1646 ppb	11:59:17
3	Mn 257.610†	-162.5	26.9	0.1059 µg/L	0.1059 ppb	11:59:37
3	Mo 202.031†	28.0	10.8	1.3582 µg/L	1.3582 ppb	11:59:37
3	Ni 231.604†	331.2	-4.0	-0.2520 µg/L	-0.2520 ppb	11:59:37
3	P 214.914†	211.6	9.2	22.070 µg/L	22.070 ppb	11:59:37
3	Pb 220.353†	56.4	0.5	0.1381 µg/L	0.1381 ppb	11:59:37
3	S 181.975 Axial†	25.3	-0.2	-1.1768 µg/L	-1.1768 ppb	11:59:37
3	Sb 206.836†	28.4	6.0	6.6472 µg/L	6.6472 ppb	11:59:37
3	Se 196.026†	9.4	-3.0	-4.5919 µg/L	-4.5919 ppb	11:59:37
3	SiO2†	2269.2	-8.0	-1.6913 µg/L	-1.6913 ppb	11:59:17
3	Si 251.611†	333.3	29.1	2.4369 µg/L	2.4369 ppb	11:59:37
3	Sn 189.927†	26.2	2.8	1.6261 µg/L	1.6261 ppb	11:59:37
3	Ti 334.940†	765.0	-8.1	-0.0220 µg/L	-0.0220 ppb	11:59:17
3	Tl 190.801†	-24.1	-1.0	-1.7329 µg/L	-1.7329 ppb	11:59:37
3	U 409.014†	-203.5	29.3	2.7902 µg/L	2.7902 ppb	11:59:17
3	V 292.402†	-93.9	28.1	0.3670 µg/L	0.3670 ppb	11:59:17
3	Zn 213.857†	684.3	13.5	0.3911 µg/L	0.3911 ppb	11:59:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1940735.3	99.863	%	0.2205				0.22%
Sc RADIAL	76177.1	99.2	%	0.79				0.80%
Y 371.029	1227182.0	99.868	%	0.1787				0.18%
Ag 328.068†	-0.1	0.0031	µg/L	0.13264	0.0031	ppb	0.13264	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.0	-1.3709	µg/L	6.01934	-1.3709	ppb	6.01934	439.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.0	-2.2486	µg/L	7.27082	-2.2486	ppb	7.27082	323.35%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	11.3	0.5328	µg/L	0.34184	0.5328	ppb	0.34184	64.16%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.5	-0.0128	µg/L	0.03082	-0.0128	ppb	0.03082	239.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	116.2	0.0809	µg/L	0.02142	0.0809	ppb	0.02142	26.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.6	0.4383	µg/L	1.42369	0.4383	ppb	1.42369	324.80%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	8.5	0.2474	µg/L	0.12392	0.2474	ppb	0.12392	50.09%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.0	0.1129	µg/L	0.09891	0.1129	ppb	0.09891	87.64%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 1.3      0.0308 µg/L       0.30226      0.0308 ppb        0.30226 981.02%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                17.4      0.1358 µg/L       0.30481      0.1358 ppb        0.30481 224.45%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.4      33.990 µg/L       23.0453      33.990 ppb        23.0453  67.80%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†           6.3      4.1490 µg/L      29.04954      4.1490 ppb       29.04954 700.15%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.9      20.492 µg/L       12.7178      20.492 ppb        12.7178  62.06%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                27.4      0.1049 µg/L       0.00151      0.1049 ppb        0.00151   1.44%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.1      0.6464 µg/L       0.62189      0.6464 ppb        0.62189  96.22%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -198.2     -56.919 µg/L        6.5829     -56.919 ppb         6.5829  11.57%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.7      0.3590 µg/L       0.56111      0.3590 ppb        0.56111 156.31%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  9.2      21.920 µg/L        9.5832      21.920 ppb         9.5832  43.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.9      0.5609 µg/L       0.42550      0.5609 ppb        0.42550  75.86%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.2     -0.9548 µg/L       0.34433     -0.9548 ppb        0.34433  36.06%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.9      5.4061 µg/L       6.51737      5.4061 ppb        6.51737 120.55%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.5     -8.6052 µg/L       8.53182     -8.6052 ppb        8.53182  99.15%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      -0.5     -0.1038 µg/L       5.14939     -0.1038 ppb        5.14939 >999.9%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                34.9      2.9303 µg/L       0.57248      2.9303 ppb        0.57248  19.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.8      1.0387 µg/L       1.87690      1.0387 ppb        1.87690 180.69%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                11.8      0.0749 µg/L       0.07863      0.0749 ppb        0.07863 105.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                66.7      0.1647 µg/L       0.19855      0.1647 ppb        0.19855 120.59%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.1     -3.5380 µg/L       1.56379     -3.5380 ppb        1.56379  44.20%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 19.1      1.8163 µg/L       4.05876      1.8163 ppb        4.05876 223.47%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 18.6      0.2396 µg/L       0.50556      0.2396 ppb        0.50556 211.04%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                12.2      0.3510 µg/L       0.17581      0.3510 ppb        0.17581  50.09%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 42
Sample ID: 244227002|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 334
Date Collected: 1/27/2010 11:59:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227002|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77778.8	77778.8	101	%			12:00:25
1	Al 396.153Radial†	60463.7	59746.0	41514	µg/L	41514	ppb	12:00:25
1	Ca 317.933Radial†	10163.1	9786.1	7705.8	µg/L	7705.8	ppb	12:00:45
1	Fe 238.204 Radial†	7442.5	7334.8	105300	µg/L	105300	ppb	12:00:45
1	K 766.490 Radial†	10294.5	9755.5	6476.1	µg/L	6476.1	ppb	12:00:25
1	Mg 279.077 IEC†	805.8	787.6	8470.8	µg/L	8470.8	ppb	12:00:45
1	Na 589.592 Radial†	2937.2	2356.0	676.57	µg/L	676.57	ppb	12:00:25
1	Sr 421.552†	10867.1	10175.4	64.653	µg/L	64.653	ppb	12:00:25
1	Sc 361.383	1979732.5	1979732.5	101.87	%			12:01:50
1	Y 371.029	1281451.4	1281451.4	104.28	%			12:01:50
1	Ag 328.068†	-1013.6	-939.9	-1.5302	µg/L	-1.5302	ppb	12:01:55
1	As 188.979†	4.7	4.1	15.112	µg/L	15.112	ppb	12:02:16
1	B 249.677†	1431.0	1289.5	7.8925	µg/L	7.8925	ppb	12:01:55
1	Ba 233.527†	16360.7	16075.0	467.19	µg/L	467.19	ppb	12:01:55
1	Be 313.107†	13680.7	9590.1	5.2367	µg/L	5.2367	ppb	12:01:55
1	Cd 226.502†	353.4	482.4	2.3407	µg/L	2.3407	ppb	12:01:55
1	Co 228.616†	410.6	448.1	16.819	µg/L	16.819	ppb	12:02:16
1	Cr 267.716†	2789.9	2821.5	65.500	µg/L	65.500	ppb	12:01:55
1	Cu 324.752†	8779.2	4949.8	51.854	µg/L	51.854	ppb	12:01:55
1	Mn 257.610†	673179.4	661012.4	2455.6	µg/L	2455.6	ppb	12:01:50
1	Mo 202.031†	53.7	35.5	8.4602	µg/L	8.4602	ppb	12:02:16
1	Ni 231.604†	988.6	635.1	41.352	µg/L	41.352	ppb	12:02:16
1	P 214.914†	485.5	274.1	578.41	µg/L	578.41	ppb	12:02:16
1	Pb 220.353†	363.1	300.5	85.863	µg/L	85.863	ppb	12:02:16
1	S 181.975 Axial†	57.4	30.9	176.92	µg/L	176.92	ppb	12:02:16
1	Sb 206.836†	25.1	2.2	1.3039	µg/L	1.3039	ppb	12:02:16
1	Se 196.026†	-254.6	-262.3	-12.818	µg/L	-12.818	ppb	12:02:16
1	SiO2†	337627.1	329151.1	69475	µg/L	69475	ppb	12:01:50
1	Si 251.611†	389758.4	382299.7	32066	µg/L	32066	ppb	12:01:50
1	Sn 189.927†	-19.0	-42.0	-11.496	µg/L	-11.496	ppb	12:02:16
1	Ti 334.940†	1549805.9	1520584.9	3791.7	µg/L	3791.7	ppb	12:01:50
1	Tl 190.801†	-46.9	-23.0	-2.0895	µg/L	-2.0895	ppb	12:02:16
1	U 409.014†	-175.8	60.4	-9.3441	µg/L	-9.3441	ppb	12:01:50
1	V 292.402†	7290.8	7279.1	96.286	µg/L	96.286	ppb	12:01:55
1	Zn 213.857†	15227.4	14276.6	410.49	µg/L	410.49	ppb	12:01:55
2	Sc RADIAL	77541.0	77541.0	101	%			12:00:51
2	Al 396.153Radial†	60218.0	59685.8	41473	µg/L	41473	ppb	12:00:51
2	Ca 317.933Radial†	10128.7	9782.9	7703.2	µg/L	7703.2	ppb	12:01:11
2	Fe 238.204 Radial†	7437.5	7352.4	105550	µg/L	105550	ppb	12:01:11
2	K 766.490 Radial†	10301.0	9793.2	6501.1	µg/L	6501.1	ppb	12:00:51
2	Mg 279.077 IEC†	811.4	795.5	8556.6	µg/L	8556.6	ppb	12:01:11
2	Na 589.592 Radial†	2871.6	2299.9	660.45	µg/L	660.45	ppb	12:00:51
2	Sr 421.552†	10786.1	10128.1	64.353	µg/L	64.353	ppb	12:00:51
2	Sc 361.383	1969077.6	1969077.6	101.32	%			12:02:23
2	Y 371.029	1274884.8	1274884.8	103.75	%			12:02:23
2	Ag 328.068†	-984.0	-916.1	-1.2836	µg/L	-1.2836	ppb	12:02:29
2	As 188.979†	7.0	6.3	20.309	µg/L	20.309	ppb	12:02:49
2	B 249.677†	1445.9	1311.8	8.8478	µg/L	8.8478	ppb	12:02:29
2	Ba 233.527†	16507.8	16307.0	473.93	µg/L	473.93	ppb	12:02:29
2	Be 313.107†	13809.3	9789.8	5.3714	µg/L	5.3714	ppb	12:02:29
2	Cd 226.502†	350.6	481.5	2.2870	µg/L	2.2870	ppb	12:02:29
2	Co 228.616†	385.5	425.4	15.546	µg/L	15.546	ppb	12:02:49
2	Cr 267.716†	2787.9	2834.3	65.798	µg/L	65.798	ppb	12:02:29
2	Cu 324.752†	8846.9	5063.3	52.742	µg/L	52.742	ppb	12:02:29
2	Mn 257.610†	671057.6	662494.1	2461.1	µg/L	2461.1	ppb	12:02:23
2	Mo 202.031†	47.8	30.0	7.7774	µg/L	7.7774	ppb	12:02:49
2	Ni 231.604†	1007.2	658.7	42.844	µg/L	42.844	ppb	12:02:49
2	P 214.914†	483.3	274.5	579.12	µg/L	579.12	ppb	12:02:49
2	Pb 220.353†	353.9	293.3	83.743	µg/L	83.743	ppb	12:02:49

2	S 181.975 Axial†	55.8	29.5	169.25 µg/L	169.25 ppb	12:02:49
2	Sb 206.836†	24.2	1.4	0.4063 µg/L	0.4063 ppb	12:02:49
2	Se 196.026†	-253.9	-263.0	-12.961 µg/L	-12.961 ppb	12:02:49
2	SiO2†	336823.2	330151.1	69686 µg/L	69686 ppb	12:02:23
2	Si 251.611†	388887.6	383510.6	32168 µg/L	32168 ppb	12:02:23
2	Sn 189.927†	-23.2	-46.3	-13.962 µg/L	-13.962 ppb	12:02:49
2	Ti 334.940†	1546187.6	1525246.2	3803.4 µg/L	3803.4 ppb	12:02:23
2	Tl 190.801†	-47.6	-23.9	-3.5719 µg/L	-3.5719 ppb	12:02:49
2	U 409.014†	-117.3	117.2	-3.9576 µg/L	-3.9576 ppb	12:02:23
2	V 292.402†	7359.8	7385.9	97.629 µg/L	97.629 ppb	12:02:29
2	Zn 213.857†	15253.3	14383.0	413.56 µg/L	413.56 ppb	12:02:29
3	Sc RADIAL	77867.7	77867.7	101 %		12:01:16
3	Al 396.153Radial†	60804.1	60013.7	41700 µg/L	41700 ppb	12:01:16
3	Ca 317.933Radial†	10113.6	9725.9	7658.4 µg/L	7658.4 ppb	12:01:37
3	Fe 238.204 Radial†	7435.1	7319.2	105080 µg/L	105080 ppb	12:01:37
3	K 766.490 Radial†	10326.5	9775.5	6489.3 µg/L	6489.3 ppb	12:01:16
3	Mg 279.077 IEC†	808.3	789.1	8487.6 µg/L	8487.6 ppb	12:01:37
3	Na 589.592 Radial†	2915.5	2331.4	669.48 µg/L	669.48 ppb	12:01:16
3	Sr 421.552†	10852.9	10149.1	64.487 µg/L	64.487 ppb	12:01:16
3	Sc 361.383	1971897.8	1971897.8	101.47 %		12:02:57
3	Y 371.029	1276348.4	1276348.4	103.87 %		12:02:57
3	Ag 328.068†	-960.1	-891.2	-1.1023 µg/L	-1.1023 ppb	12:03:03
3	As 188.979†	8.9	8.3	24.748 µg/L	24.748 ppb	12:03:23
3	B 249.677†	1406.0	1270.5	7.0817 µg/L	7.0817 ppb	12:03:03
3	Ba 233.527†	15961.8	15745.6	457.62 µg/L	457.62 ppb	12:03:03
3	Be 313.107†	13365.6	9333.0	5.0798 µg/L	5.0798 ppb	12:03:03
3	Cd 226.502†	294.5	425.7	0.6950 µg/L	0.6950 ppb	12:03:03
3	Co 228.616†	364.0	403.7	14.495 µg/L	14.495 ppb	12:03:23
3	Cr 267.716†	2707.8	2751.4	63.873 µg/L	63.873 ppb	12:03:03
3	Cu 324.752†	8663.8	4870.4	51.225 µg/L	51.225 ppb	12:03:03
3	Mn 257.610†	661908.6	652530.1	2424.2 µg/L	2424.2 ppb	12:02:57
3	Mo 202.031†	50.8	32.9	8.1223 µg/L	8.1223 ppb	12:03:23
3	Ni 231.604†	943.6	594.6	38.800 µg/L	38.800 ppb	12:03:23
3	P 214.914†	461.8	252.6	527.26 µg/L	527.26 ppb	12:03:23
3	Pb 220.353†	342.6	281.7	80.402 µg/L	80.402 ppb	12:03:23
3	S 181.975 Axial†	62.4	36.0	206.35 µg/L	206.35 ppb	12:03:23
3	Sb 206.836†	21.3	-1.4	-2.6743 µg/L	-2.6743 ppb	12:03:23
3	Se 196.026†	-220.2	-229.5	38.203 µg/L	38.203 ppb	12:03:23
3	SiO2†	332988.1	325895.9	68788 µg/L	68788 ppb	12:02:57
3	Si 251.611†	384580.5	378716.8	31766 µg/L	31766 ppb	12:02:57
3	Sn 189.927†	-27.0	-50.1	-16.202 µg/L	-16.202 ppb	12:03:23
3	Ti 334.940†	1519894.0	1497150.1	3733.3 µg/L	3733.3 ppb	12:02:57
3	Tl 190.801†	-43.2	-19.5	3.2472 µg/L	3.2472 ppb	12:03:23
3	U 409.014†	-168.3	67.1	-8.6729 µg/L	-8.6729 ppb	12:02:57
3	V 292.402†	7109.1	7128.5	94.396 µg/L	94.396 ppb	12:03:03
3	Zn 213.857†	14817.4	13931.9	400.46 µg/L	400.46 ppb	12:03:03

Mean Data: 244227002|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1973569.3	101.55	%	0.284				0.28%
Sc RADIAL	77729.2	101	%	0.2				0.22%
Y 371.029	1277561.5	103.97	%	0.281				0.27%
Ag 328.068†	-915.7	-1.3054	µg/L	0.21478	-1.3054	ppb	0.21478	16.45%
Al 396.153Radial†	59815.2	41562	µg/L	121.3	41562	ppb	121.3	0.29%
As 188.979†	6.2	20.056	µg/L	4.8227	20.056	ppb	4.8227	24.05%
B 249.677†	1290.6	7.9407	µg/L	0.88403	7.9407	ppb	0.88403	11.13%
Ba 233.527†	16042.5	466.25	µg/L	8.198	466.25	ppb	8.198	1.76%
Be 313.107†	9571.0	5.2293	µg/L	0.14592	5.2293	ppb	0.14592	2.79%
Ca 317.933Radial†	9765.0	7689.1	µg/L	26.68	7689.1	ppb	26.68	0.35%
Cd 226.502†	463.2	1.7742	µg/L	0.93503	1.7742	ppb	0.93503	52.70%
Co 228.616†	425.7	15.620	µg/L	1.1639	15.620	ppb	1.1639	7.45%
Cr 267.716†	2802.4	65.057	µg/L	1.0360	65.057	ppb	1.0360	1.59%
Cu 324.752†	4961.2	51.941	µg/L	0.7622	51.941	ppb	0.7622	1.47%
Fe 238.204 Radial†	7335.5	105310	µg/L	238.8	105310	ppb	238.8	0.23%
K 766.490 Radial†	9774.8	6488.8	µg/L	12.53	6488.8	ppb	12.53	0.19%
Mg 279.077 IEC†	790.7	8505.0	µg/L	45.47	8505.0	ppb	45.47	0.53%
Mn 257.610†	658678.9	2447.0	µg/L	19.89	2447.0	ppb	19.89	0.81%
Mo 202.031†	32.8	8.1199	µg/L	0.34140	8.1199	ppb	0.34140	4.20%
Na 589.592 Radial†	2329.1	668.83	µg/L	8.076	668.83	ppb	8.076	1.21%

Ni 231.604†	629.4	40.999	µg/L	2.0451	40.999	ppb	2.0451	4.99%
P 214.914†	267.1	561.59	µg/L	29.740	561.59	ppb	29.740	5.30%
Pb 220.353†	291.9	83.336	µg/L	2.7533	83.336	ppb	2.7533	3.30%
S 181.975 Axial†	32.1	184.17	µg/L	19.588	184.17	ppb	19.588	10.64%
Sb 206.836†	0.8	-0.3214	µg/L	2.08655	-0.3214	ppb	2.08655	649.26%
Se 196.026†	-251.6	4.1417	µg/L	29.49832	4.1417	ppb	29.49832	712.23%
SiO2†	328399.4	69316	µg/L	469.6	69316	ppb	469.6	0.68%
Si 251.611†	381509.0	32000	µg/L	209.1	32000	ppb	209.1	0.65%
Sn 189.927†	-46.1	-13.887	µg/L	2.3540	-13.887	ppb	2.3540	16.95%
Sr 421.552†	10150.9	64.498	µg/L	0.1505	64.498	ppb	0.1505	0.23%
Ti 334.940†	1514327.1	3776.1	µg/L	37.55	3776.1	ppb	37.55	0.99%
Tl 190.801†	-22.1	-0.8047	µg/L	3.58652	-0.8047	ppb	3.58652	445.68%
U 409.014†	81.6	-7.3249	µg/L	2.93542	-7.3249	ppb	2.93542	40.07%
V 292.402†	7264.5	96.104	µg/L	1.6244	96.104	ppb	1.6244	1.69%
Zn 213.857†	14197.2	408.17	µg/L	6.852	408.17	ppb	6.852	1.68%

Sequence No.: 43
Sample ID: 244227003|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 335
Date Collected: 1/27/2010 12:03:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227003|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77254.0	77254.0	101	%			12:04:05
1	Al 396.153Radial†	50600.0	50343.5	34981	µg/L	34981	ppb	12:04:05
1	Ca 317.933Radial†	8639.8	8339.6	6566.7	µg/L	6566.7	ppb	12:04:25
1	Fe 238.204 Radial†	6173.6	6123.0	87905	µg/L	87905	ppb	12:04:25
1	K 766.490 Radial†	7571.6	7117.1	4724.6	µg/L	4724.6	ppb	12:04:05
1	Mg 279.077 IEC†	623.0	611.1	6566.3	µg/L	6566.3	ppb	12:04:25
1	Na 589.592 Radial†	3534.1	2969.3	852.68	µg/L	852.68	ppb	12:04:05
1	Sr 421.552†	8079.6	7476.5	47.505	µg/L	47.505	ppb	12:04:05
1	Sc 361.383	1954434.9	1954434.9	100.57	%			12:05:30
1	Y 371.029	1291659.6	1291659.6	105.12	%			12:05:30
1	Ag 328.068†	-819.1	-759.4	-1.1691	µg/L	-1.1691	ppb	12:05:36
1	As 188.979†	7.9	7.3	21.566	µg/L	21.566	ppb	12:05:56
1	B 249.677†	1212.2	1090.2	7.3367	µg/L	7.3367	ppb	12:05:36
1	Ba 233.527†	9932.4	9890.8	287.46	µg/L	287.46	ppb	12:05:36
1	Be 313.107†	14263.1	10343.1	5.8335	µg/L	5.8335	ppb	12:05:36
1	Cd 226.502†	251.1	385.1	1.4586	µg/L	1.4586	ppb	12:05:36
1	Co 228.616†	267.1	310.6	9.6302	µg/L	9.6302	ppb	12:05:56
1	Cr 267.716†	4517.3	4574.6	106.14	µg/L	106.14	ppb	12:05:36
1	Cu 324.752†	5240.4	1542.6	23.818	µg/L	23.818	ppb	12:05:36
1	Mn 257.610†	705444.5	701648.8	2603.5	µg/L	2603.5	ppb	12:05:30
1	Mo 202.031†	55.0	37.5	8.0512	µg/L	8.0512	ppb	12:05:56
1	Ni 231.604†	1228.0	885.7	56.926	µg/L	56.926	ppb	12:05:56
1	P 214.914†	524.8	319.3	701.76	µg/L	701.76	ppb	12:05:56
1	Pb 220.353†	185.1	128.1	36.045	µg/L	36.045	ppb	12:05:56
1	S 181.975 Axial†	56.4	30.5	174.98	µg/L	174.98	ppb	12:05:56
1	Sb 206.836†	24.9	2.3	1.0382	µg/L	1.0382	ppb	12:05:56
1	Se 196.026†	-211.4	-222.7	-16.278	µg/L	-16.278	ppb	12:05:56
1	SiO2†	307893.9	303875.7	64140	µg/L	64140	ppb	12:05:30
1	Si 251.611†	355344.5	353032.5	29611	µg/L	29611	ppb	12:05:30
1	Sn 189.927†	-0.7	-24.1	-3.2695	µg/L	-3.2695	ppb	12:05:56
1	Ti 334.940†	1453616.1	1444630.6	3602.5	µg/L	3602.5	ppb	12:05:30
1	Tl 190.801†	-43.7	-20.4	2.1027	µg/L	2.1027	ppb	12:05:56
1	U 409.014†	-1289.9	-1049.7	-112.79	µg/L	-112.79	ppb	12:05:30
1	V 292.402†	4433.5	4530.6	61.173	µg/L	61.173	ppb	12:05:36
1	Zn 213.857†	13339.6	12592.9	362.31	µg/L	362.31	ppb	12:05:36
2	Sc RADIAL	76720.3	76720.3	99.9	%			12:04:31
2	Al 396.153Radial†	51403.6	51498.1	35783	µg/L	35783	ppb	12:04:31
2	Ca 317.933Radial†	8696.9	8456.5	6658.8	µg/L	6658.8	ppb	12:04:51
2	Fe 238.204 Radial†	6220.6	6212.8	89194	µg/L	89194	ppb	12:04:51
2	K 766.490 Radial†	7687.6	7285.6	4836.4	µg/L	4836.4	ppb	12:04:31
2	Mg 279.077 IEC†	625.4	617.9	6638.4	µg/L	6638.4	ppb	12:04:51
2	Na 589.592 Radial†	3587.5	3047.2	875.04	µg/L	875.04	ppb	12:04:31
2	Sr 421.552†	8196.8	7649.8	48.606	µg/L	48.606	ppb	12:04:31
2	Sc 361.383	1939609.6	1939609.6	99.805	%			12:06:04
2	Y 371.029	1280659.4	1280659.4	104.22	%			12:06:04
2	Ag 328.068†	-823.2	-769.7	-1.1830	µg/L	-1.1830	ppb	12:06:09
2	As 188.979†	7.3	6.8	20.539	µg/L	20.539	ppb	12:06:30
2	B 249.677†	1176.6	1063.7	5.3772	µg/L	5.3772	ppb	12:06:09
2	Ba 233.527†	9934.2	9968.1	289.71	µg/L	289.71	ppb	12:06:09
2	Be 313.107†	14334.5	10523.1	5.9667	µg/L	5.9667	ppb	12:06:09
2	Cd 226.502†	235.2	371.1	0.9017	µg/L	0.9017	ppb	12:06:09
2	Co 228.616†	273.0	318.5	10.106	µg/L	10.106	ppb	12:06:30
2	Cr 267.716†	4523.1	4614.7	107.07	µg/L	107.07	ppb	12:06:09
2	Cu 324.752†	5221.4	1563.4	24.153	µg/L	24.153	ppb	12:06:09
2	Mn 257.610†	696022.3	697569.8	2588.6	µg/L	2588.6	ppb	12:06:04
2	Mo 202.031†	47.0	29.9	7.1433	µg/L	7.1433	ppb	12:06:30
2	Ni 231.604†	1229.8	896.8	57.640	µg/L	57.640	ppb	12:06:30
2	P 214.914†	529.4	328.0	721.55	µg/L	721.55	ppb	12:06:30
2	Pb 220.353†	179.2	123.6	34.713	µg/L	34.713	ppb	12:06:30

2	S 181.975 Axial†	53.3	27.8	159.61	µg/L	159.61 ppb	12:06:30
2	Sb 206.836†	25.8	3.5	2.2381	µg/L	2.2381 ppb	12:06:30
2	Se 196.026†	-208.5	-221.3	-9.2082	µg/L	-9.2082 ppb	12:06:30
2	SiO2†	304092.5	302407.0	63830	µg/L	63830 ppb	12:06:04
2	Si 251.611†	350786.2	351166.0	29455	µg/L	29455 ppb	12:06:04
2	Sn 189.927†	-8.0	-31.5	-7.4039	µg/L	-7.4039 ppb	12:06:30
2	Ti 334.940†	1434358.9	1436383.7	3581.9	µg/L	3581.9 ppb	12:06:04
2	Tl 190.801†	-40.9	-17.9	6.0558	µg/L	6.0558 ppb	12:06:30
2	U 409.014†	-1135.9	-905.1	-99.178	µg/L	-99.178 ppb	12:06:04
2	V 292.402†	4414.7	4545.5	61.435	µg/L	61.435 ppb	12:06:09
2	Zn 213.857†	13334.4	12689.1	365.04	µg/L	365.04 ppb	12:06:09
3	Sc RADIAL	76505.0	76505.0	99.6	%		12:04:57
3	Al 396.153Radial†	51538.3	51778.2	35978	µg/L	35978 ppb	12:04:57
3	Ca 317.933Radial†	8766.9	8551.3	6733.4	µg/L	6733.4 ppb	12:05:17
3	Fe 238.204 Radial†	6259.4	6269.2	90004	µg/L	90004 ppb	12:05:17
3	K 766.490 Radial†	7675.1	7294.7	4842.5	µg/L	4842.5 ppb	12:04:57
3	Mg 279.077 IEC†	631.8	626.1	6727.0	µg/L	6727.0 ppb	12:05:17
3	Na 589.592 Radial†	3639.5	3109.6	892.95	µg/L	892.95 ppb	12:04:57
3	Sr 421.552†	8252.3	7728.5	49.106	µg/L	49.106 ppb	12:04:57
3	Sc 361.383	1939827.4	1939827.4	99.816	%		12:06:38
3	Y 371.029	1280065.9	1280065.9	104.17	%		12:06:38
3	Ag 328.068†	-831.4	-777.8	-1.2204	µg/L	-1.2204 ppb	12:06:43
3	As 188.979†	7.1	6.6	20.054	µg/L	20.054 ppb	12:07:04
3	B 249.677†	1170.2	1057.2	4.6335	µg/L	4.6335 ppb	12:06:43
3	Ba 233.527†	9719.5	9751.9	283.42	µg/L	283.42 ppb	12:06:43
3	Be 313.107†	13968.2	10154.4	5.7197	µg/L	5.7197 ppb	12:06:43
3	Cd 226.502†	188.6	324.4	-0.5664	µg/L	-0.5664 ppb	12:06:43
3	Co 228.616†	249.5	295.0	8.8609	µg/L	8.8609 ppb	12:07:04
3	Cr 267.716†	4382.9	4473.7	103.80	µg/L	103.80 ppb	12:06:43
3	Cu 324.752†	5266.4	1607.8	24.600	µg/L	24.600 ppb	12:06:43
3	Mn 257.610†	692080.6	693542.5	2573.8	µg/L	2573.8 ppb	12:06:38
3	Mo 202.031†	43.1	26.0	6.6845	µg/L	6.6845 ppb	12:07:04
3	Ni 231.604†	1185.1	851.9	54.825	µg/L	54.825 ppb	12:07:04
3	P 214.914†	509.5	307.9	672.98	µg/L	672.98 ppb	12:07:04
3	Pb 220.353†	178.4	122.7	34.448	µg/L	34.448 ppb	12:07:04
3	S 181.975 Axial†	53.7	28.2	161.85	µg/L	161.85 ppb	12:07:04
3	Sb 206.836†	20.2	-2.2	-3.9589	µg/L	-3.9589 ppb	12:07:04
3	Se 196.026†	-190.7	-203.5	21.987	µg/L	21.987 ppb	12:07:04
3	SiO2†	303270.8	301549.6	63649	µg/L	63649 ppb	12:06:38
3	Si 251.611†	350138.2	350477.5	29397	µg/L	29397 ppb	12:06:38
3	Sn 189.927†	2.0	-21.4	-1.4263	µg/L	-1.4263 ppb	12:07:04
3	Ti 334.940†	1424182.3	1426027.0	3556.0	µg/L	3556.0 ppb	12:06:38
3	Tl 190.801†	-43.1	-20.1	1.9689	µg/L	1.9689 ppb	12:07:04
3	U 409.014†	-1276.8	-1046.2	-112.76	µg/L	-112.76 ppb	12:06:38
3	V 292.402†	4259.1	4389.1	59.508	µg/L	59.508 ppb	12:06:43
3	Zn 213.857†	13015.9	12368.6	355.67	µg/L	355.67 ppb	12:06:43

Mean Data: 244227003|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1944624.0	100.06	%	0.437				0.44%
Sc RADIAL	76826.4	100	%	0.5				0.50%
Y 371.029	1284128.3	104.50	%	0.531				0.51%
Ag 328.068†	-769.0	-1.1908	µg/L	0.02653	-1.1908	ppb	0.02653	2.23%
Al 396.153Radial†	51206.6	35581	µg/L	528.4	35581	ppb	528.4	1.49%
As 188.979†	6.9	20.720	µg/L	0.7717	20.720	ppb	0.7717	3.72%
B 249.677†	1070.3	5.7825	µg/L	1.39640	5.7825	ppb	1.39640	24.15%
Ba 233.527†	9870.3	286.86	µg/L	3.185	286.86	ppb	3.185	1.11%
Be 313.107†	10340.2	5.8399	µg/L	0.12363	5.8399	ppb	0.12363	2.12%
Ca 317.933Radial†	8449.1	6653.0	µg/L	83.50	6653.0	ppb	83.50	1.26%
Cd 226.502†	360.2	0.5980	µg/L	1.04610	0.5980	ppb	1.04610	174.94%
Co 228.616†	308.0	9.5323	µg/L	0.62826	9.5323	ppb	0.62826	6.59%
Cr 267.716†	4554.3	105.67	µg/L	1.686	105.67	ppb	1.686	1.60%
Cu 324.752†	1571.3	24.190	µg/L	0.3924	24.190	ppb	0.3924	1.62%
Fe 238.204 Radial†	6201.7	89035	µg/L	1058.7	89035	ppb	1058.7	1.19%
K 766.490 Radial†	7232.4	4801.2	µg/L	66.41	4801.2	ppb	66.41	1.38%
Mg 279.077 IEC†	618.4	6643.9	µg/L	80.46	6643.9	ppb	80.46	1.21%
Mn 257.610†	697587.0	2588.6	µg/L	14.84	2588.6	ppb	14.84	0.57%
Mo 202.031†	31.1	7.2930	µg/L	0.69557	7.2930	ppb	0.69557	9.54%
Na 589.592 Radial†	3042.0	873.56	µg/L	20.179	873.56	ppb	20.179	2.31%

Ni 231.604†	878.1	56.464	µg/L	1.4634	56.464	ppb	1.4634	2.59%
P 214.914†	318.4	698.76	µg/L	24.424	698.76	ppb	24.424	3.50%
Pb 220.353†	124.8	35.069	µg/L	0.8560	35.069	ppb	0.8560	2.44%
S 181.975 Axial†	28.9	165.48	µg/L	8.303	165.48	ppb	8.303	5.02%
Sb 206.836†	1.2	-0.2275	µg/L	3.28669	-0.2275	ppb	3.28669	>999.9%
Se 196.026†	-215.8	-1.1664	µg/L	20.36095	-1.1664	ppb	20.36095	>999.9%
SiO2†	302610.8	63873	µg/L	248.3	63873	ppb	248.3	0.39%
Si 251.611†	351558.7	29488	µg/L	110.9	29488	ppb	110.9	0.38%
Sn 189.927†	-25.7	-4.0333	µg/L	3.06110	-4.0333	ppb	3.06110	75.90%
Sr 421.552†	7618.3	48.406	µg/L	0.8192	48.406	ppb	0.8192	1.69%
Ti 334.940†	1435680.4	3580.1	µg/L	23.25	3580.1	ppb	23.25	0.65%
Tl 190.801†	-19.5	3.3758	µg/L	2.32194	3.3758	ppb	2.32194	68.78%
U 409.014†	-1000.3	-108.24	µg/L	7.848	-108.24	ppb	7.848	7.25%
V 292.402†	4488.4	60.706	µg/L	1.0452	60.706	ppb	1.0452	1.72%
Zn 213.857†	12550.2	361.01	µg/L	4.822	361.01	ppb	4.822	1.34%

Sequence No.: 44
Sample ID: 244227004|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 336
Date Collected: 1/27/2010 12:07:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227004|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76849.5	76849.5	100	%			12:07:46
1	Al 396.153Radial†	52160.4	52168.1	36249	µg/L	36249	ppb	12:07:46
1	Ca 317.933Radial†	12516.2	12259.7	9653.6	µg/L	9653.6	ppb	12:08:06
1	Fe 238.204 Radial†	8246.7	8227.6	118120	µg/L	118120	ppb	12:08:06
1	K 766.490 Radial†	11243.1	10826.7	7187.2	µg/L	7187.2	ppb	12:07:46
1	Mg 279.077 IEC†	921.4	912.7	9820.8	µg/L	9820.8	ppb	12:08:06
1	Na 589.592 Radial†	7747.5	7199.6	2067.5	µg/L	2067.5	ppb	12:07:46
1	Sr 421.552†	12641.6	12079.0	76.749	µg/L	76.749	ppb	12:07:46
1	Sc 361.383	1962929.9	1962929.9	101.01	%			12:09:11
1	Y 371.029	1270258.3	1270258.3	103.37	%			12:09:11
1	Ag 328.068†	-1094.7	-1028.7	-1.5445	µg/L	-1.5445	ppb	12:09:16
1	As 188.979†	1.7	1.2	9.0223	µg/L	9.0223	ppb	12:09:37
1	B 249.677†	1460.0	1330.2	3.4389	µg/L	3.4389	ppb	12:09:16
1	Ba 233.527†	16612.6	16461.8	478.43	µg/L	478.43	ppb	12:09:16
1	Be 313.107†	12305.1	8343.2	4.3161	µg/L	4.3161	ppb	12:09:16
1	Cd 226.502†	319.9	452.2	0.0759	µg/L	0.0759	ppb	12:09:37
1	Co 228.616†	358.4	399.8	13.877	µg/L	13.877	ppb	12:09:37
1	Cr 267.716†	9648.6	9635.3	223.54	µg/L	223.54	ppb	12:09:16
1	Cu 324.752†	5835.0	2108.7	32.274	µg/L	32.274	ppb	12:09:16
1	Mn 257.610†	438058.6	433888.3	1618.2	µg/L	1618.2	ppb	12:09:11
1	Mo 202.031†	79.4	61.4	12.204	µg/L	12.204	ppb	12:09:37
1	Ni 231.604†	2147.8	1791.0	114.35	µg/L	114.35	ppb	12:09:37
1	P 214.914†	812.4	601.8	1353.2	µg/L	1353.2	ppb	12:09:37
1	Pb 220.353†	190.8	133.0	36.425	µg/L	36.425	ppb	12:09:37
1	S 181.975 Axial†	67.3	41.1	235.67	µg/L	235.67	ppb	12:09:37
1	Sb 206.836†	24.1	1.4	-1.4719	µg/L	-1.4719	ppb	12:09:37
1	Se 196.026†	-281.5	-291.1	-9.3573	µg/L	-9.3573	ppb	12:09:37
1	SiO2†	328684.9	323134.9	68205	µg/L	68205	ppb	12:09:11
1	Si 251.611†	379667.1	375584.0	31503	µg/L	31503	ppb	12:09:11
1	Sn 189.927†	-32.5	-55.5	-17.512	µg/L	-17.512	ppb	12:09:37
1	Ti 334.940†	1591749.6	1575134.0	3927.7	µg/L	3927.7	ppb	12:09:11
1	Tl 190.801†	-46.2	-22.7	-4.9645	µg/L	-4.9645	ppb	12:09:37
1	U 409.014†	-1596.6	-1347.8	-145.62	µg/L	-145.62	ppb	12:09:11
1	V 292.402†	7304.7	7354.1	98.148	µg/L	98.148	ppb	12:09:16
1	Zn 213.857†	14399.9	13585.2	389.36	µg/L	389.36	ppb	12:09:16
2	Sc RADIAL	76122.3	76122.3	99.1	%			12:08:12
2	Al 396.153Radial†	52854.6	53366.7	37082	µg/L	37082	ppb	12:08:12
2	Ca 317.933Radial†	12370.2	12231.8	9631.6	µg/L	9631.6	ppb	12:08:32
2	Fe 238.204 Radial†	8133.8	8192.5	117620	µg/L	117620	ppb	12:08:32
2	K 766.490 Radial†	11366.0	11058.1	7340.8	µg/L	7340.8	ppb	12:08:12
2	Mg 279.077 IEC†	914.6	914.6	9842.3	µg/L	9842.3	ppb	12:08:32
2	Na 589.592 Radial†	7884.6	7411.9	2128.4	µg/L	2128.4	ppb	12:08:12
2	Sr 421.552†	12801.9	12361.5	78.544	µg/L	78.544	ppb	12:08:12
2	Sc 361.383	1968297.9	1968297.9	101.28	%			12:09:45
2	Y 371.029	1273650.1	1273650.1	103.65	%			12:09:45
2	Ag 328.068†	-1125.9	-1056.6	-1.8377	µg/L	-1.8377	ppb	12:09:50
2	As 188.979†	4.0	3.4	14.174	µg/L	14.174	ppb	12:10:11
2	B 249.677†	1473.4	1339.6	4.1583	µg/L	4.1583	ppb	12:09:50
2	Ba 233.527†	16794.1	16596.1	482.33	µg/L	482.33	ppb	12:09:50
2	Be 313.107†	12422.4	8425.8	4.3765	µg/L	4.3765	ppb	12:09:50
2	Cd 226.502†	327.7	459.0	0.3330	µg/L	0.3330	ppb	12:10:11
2	Co 228.616†	355.3	395.8	13.670	µg/L	13.670	ppb	12:10:11
2	Cr 267.716†	9712.3	9672.2	224.40	µg/L	224.40	ppb	12:09:50
2	Cu 324.752†	5824.0	2082.1	32.004	µg/L	32.004	ppb	12:09:50
2	Mn 257.610†	438139.5	432785.3	1614.1	µg/L	1614.1	ppb	12:09:45
2	Mo 202.031†	72.1	54.0	11.251	µg/L	11.251	ppb	12:10:11
2	Ni 231.604†	2128.2	1765.8	112.76	µg/L	112.76	ppb	12:10:11
2	P 214.914†	814.7	601.9	1354.1	µg/L	1354.1	ppb	12:10:11
2	Pb 220.353†	210.5	151.9	41.994	µg/L	41.994	ppb	12:10:11

2	S 181.975 Axial†	62.4	36.1	207.07 µg/L	207.07 ppb	12:10:11
2	Sb 206.836†	31.1	8.3	6.1129 µg/L	6.1129 ppb	12:10:11
2	Se 196.026†	-270.1	-279.1	7.6697 µg/L	7.6697 ppb	12:10:11
2	SiO2†	329122.6	322679.6	68109 µg/L	68109 ppb	12:09:45
2	Si 251.611†	379999.9	374887.4	31444 µg/L	31444 ppb	12:09:45
2	Sn 189.927†	-29.6	-52.6	-15.856 µg/L	-15.856 ppb	12:10:11
2	Ti 334.940†	1593125.8	1572194.9	3920.4 µg/L	3920.4 ppb	12:09:45
2	Tl 190.801†	-38.3	-14.8	8.6316 µg/L	8.6316 ppb	12:10:11
2	U 409.014†	-1524.3	-1272.0	-138.32 µg/L	-138.32 ppb	12:09:45
2	V 292.402†	7299.2	7329.0	97.812 µg/L	97.812 ppb	12:09:50
2	Zn 213.857†	14571.2	13715.5	393.18 µg/L	393.18 ppb	12:09:50
3	Sc RADIAL	77390.6	77390.6	101 %		12:08:38
3	Al 396.153Radial†	51734.2	51380.5	35702 µg/L	35702 ppb	12:08:38
3	Ca 317.933Radial†	12395.8	12052.7	9490.5 µg/L	9490.5 ppb	12:08:58
3	Fe 238.204 Radial†	8158.4	8082.4	116030 µg/L	116030 ppb	12:08:58
3	K 766.490 Radial†	11202.9	10708.2	7108.5 µg/L	7108.5 ppb	12:08:38
3	Mg 279.077 IEC†	915.9	900.8	9693.1 µg/L	9693.1 ppb	12:08:58
3	Na 589.592 Radial†	7735.7	7133.7	2048.5 µg/L	2048.5 ppb	12:08:38
3	Sr 421.552†	12523.4	11873.4	75.442 µg/L	75.442 ppb	12:08:38
3	Sc 361.383	1968192.4	1968192.4	101.28 %		12:10:18
3	Y 371.029	1272137.3	1272137.3	103.53 %		12:10:18
3	Ag 328.068†	-1085.8	-1017.0	-1.5843 µg/L	-1.5843 ppb	12:10:24
3	As 188.979†	4.4	3.8	15.063 µg/L	15.063 ppb	12:10:45
3	B 249.677†	1437.2	1303.9	3.2307 µg/L	3.2307 ppb	12:10:24
3	Ba 233.527†	16307.5	16116.5	468.40 µg/L	468.40 ppb	12:10:24
3	Be 313.107†	12136.3	8144.0	4.2039 µg/L	4.2039 ppb	12:10:24
3	Cd 226.502†	306.3	437.9	-0.1167 µg/L	-0.1167 ppb	12:10:45
3	Co 228.616†	333.4	374.2	12.604 µg/L	12.604 ppb	12:10:45
3	Cr 267.716†	9343.2	9308.3	215.96 µg/L	215.96 ppb	12:10:24
3	Cu 324.752†	5786.1	2044.9	31.504 µg/L	31.504 ppb	12:10:24
3	Mn 257.610†	432162.5	426906.9	1592.1 µg/L	1592.1 ppb	12:10:18
3	Mo 202.031†	56.3	38.4	9.2308 µg/L	9.2308 ppb	12:10:45
3	Ni 231.604†	2029.0	1668.0	106.58 µg/L	106.58 ppb	12:10:45
3	P 214.914†	790.8	578.3	1298.6 µg/L	1298.6 ppb	12:10:45
3	Pb 220.353†	180.5	122.3	33.334 µg/L	33.334 ppb	12:10:45
3	S 181.975 Axial†	67.5	41.1	235.77 µg/L	235.77 ppb	12:10:45
3	Sb 206.836†	24.8	2.0	-0.7275 µg/L	-0.7275 ppb	12:10:45
3	Se 196.026†	-241.7	-251.1	45.920 µg/L	45.920 ppb	12:10:45
3	SiO2†	325819.1	319435.1	67424 µg/L	67424 ppb	12:10:18
3	Si 251.611†	376299.6	371253.9	31140 µg/L	31140 ppb	12:10:18
3	Sn 189.927†	-28.9	-52.0	-15.687 µg/L	-15.687 ppb	12:10:45
3	Ti 334.940†	1567726.5	1547200.0	3858.1 µg/L	3858.1 ppb	12:10:18
3	Tl 190.801†	-34.2	-10.7	15.038 µg/L	15.038 ppb	12:10:45
3	U 409.014†	-1582.2	-1329.3	-143.56 µg/L	-143.56 ppb	12:10:18
3	V 292.402†	7104.8	7137.4	95.305 µg/L	95.305 ppb	12:10:24
3	Zn 213.857†	14152.8	13303.2	381.28 µg/L	381.28 ppb	12:10:24

Mean Data: 244227004|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1966473.4	101.19	%	0.158				0.16%
Sc RADIAL	76787.5	100.0	%	0.83				0.83%
Y 371.029	1272015.3	103.52	%	0.138				0.13%
Ag 328.068†	-1034.1	-1.6555	µg/L	0.15904	-1.6555	ppb	0.15904	9.61%
Al 396.153Radial†	52305.1	36344	µg/L	695.0	36344	ppb	695.0	1.91%
As 188.979†	2.8	12.753	µg/L	3.2616	12.753	ppb	3.2616	25.57%
B 249.677†	1324.6	3.6093	µg/L	0.48668	3.6093	ppb	0.48668	13.48%
Ba 233.527†	16391.5	476.39	µg/L	7.191	476.39	ppb	7.191	1.51%
Be 313.107†	8304.3	4.2988	µg/L	0.08760	4.2988	ppb	0.08760	2.04%
Ca 317.933Radial†	12181.4	9591.9	µg/L	88.46	9591.9	ppb	88.46	0.92%
Cd 226.502†	449.7	0.0974	µg/L	0.22562	0.0974	ppb	0.22562	231.72%
Co 228.616†	390.0	13.384	µg/L	0.6830	13.384	ppb	0.6830	5.10%
Cr 267.716†	9538.6	221.30	µg/L	4.647	221.30	ppb	4.647	2.10%
Cu 324.752†	2078.6	31.927	µg/L	0.3903	31.927	ppb	0.3903	1.22%
Fe 238.204 Radial†	8167.5	117260	µg/L	1087.9	117260	ppb	1087.9	0.93%
K 766.490 Radial†	10864.4	7212.2	µg/L	118.13	7212.2	ppb	118.13	1.64%
Mg 279.077 IEC†	909.4	9785.4	µg/L	80.67	9785.4	ppb	80.67	0.82%
Mn 257.610†	431193.5	1608.1	µg/L	14.01	1608.1	ppb	14.01	0.87%
Mo 202.031†	51.3	10.895	µg/L	1.5183	10.895	ppb	1.5183	13.94%
Na 589.592 Radial†	7248.4	2081.5	µg/L	41.74	2081.5	ppb	41.74	2.01%

Ni 231.604†	1741.6	111.23	µg/L	4.107	111.23	ppb	4.107	3.69%
P 214.914†	594.0	1335.3	µg/L	31.77	1335.3	ppb	31.77	2.38%
Pb 220.353†	135.7	37.251	µg/L	4.3887	37.251	ppb	4.3887	11.78%
S 181.975 Axial†	39.5	226.17	µg/L	16.541	226.17	ppb	16.541	7.31%
Sb 206.836†	3.9	1.3045	µg/L	4.18079	1.3045	ppb	4.18079	320.49%
Se 196.026†	-273.8	14.744	µg/L	28.3094	14.744	ppb	28.3094	192.01%
SiO2†	321749.9	67913	µg/L	425.8	67913	ppb	425.8	0.63%
Si 251.611†	373908.4	31362	µg/L	195.0	31362	ppb	195.0	0.62%
Sn 189.927†	-53.4	-16.352	µg/L	1.0083	-16.352	ppb	1.0083	6.17%
Sr 421.552†	12104.6	76.912	µg/L	1.5573	76.912	ppb	1.5573	2.02%
Ti 334.940†	1564843.0	3902.1	µg/L	38.28	3902.1	ppb	38.28	0.98%
Tl 190.801†	-16.0	6.2351	µg/L	10.21445	6.2351	ppb	10.21445	163.82%
U 409.014†	-1316.3	-142.50	µg/L	3.763	-142.50	ppb	3.763	2.64%
V 292.402†	7273.5	97.088	µg/L	1.5534	97.088	ppb	1.5534	1.60%
Zn 213.857†	13534.7	387.94	µg/L	6.080	387.94	ppb	6.080	1.57%

Sequence No.: 45
Sample ID: 244227005|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 337
Date Collected: 1/27/2010 12:10:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227005|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78615.9	78615.9	102	%			12:11:27
1	Al 396.153Radial†	115434.2	112824.7	78396	µg/L	78396	ppb	12:11:27
1	Ca 317.933Radial†	20059.4	19349.5	15236	µg/L	15236	ppb	12:11:48
1	Fe 238.204 Radial†	9523.8	9290.4	133380	µg/L	133380	ppb	12:11:48
1	K 766.490 Radial†	21427.8	20526.2	13626	µg/L	13626	ppb	12:11:27
1	Mg 279.077 IEC†	1366.5	1326.9	14319	µg/L	14319	ppb	12:11:48
1	Na 589.592 Radial†	2965.3	2352.7	675.60	µg/L	675.60	ppb	12:11:48
1	Sr 421.552†	25067.9	23937.5	152.10	µg/L	152.10	ppb	12:11:27
1	Sc 361.383	1971838.8	1971838.8	101.46	%			12:12:53
1	Y 371.029	1258707.7	1258707.7	102.43	%			12:12:53
1	Ag 328.068†	-1369.0	-1294.2	-2.3287	µg/L	-2.3287	ppb	12:12:59
1	As 188.979†	9.4	8.8	27.141	µg/L	27.141	ppb	12:13:19
1	B 249.677†	1976.5	1832.8	20.144	µg/L	20.144	ppb	12:12:59
1	Ba 233.527†	29695.5	29281.6	851.09	µg/L	851.09	ppb	12:12:59
1	Be 313.107†	15949.4	11879.9	6.6370	µg/L	6.6370	ppb	12:12:59
1	Cd 226.502†	416.6	546.0	1.1859	µg/L	1.1859	ppb	12:13:19
1	Co 228.616†	887.2	919.4	41.769	µg/L	41.769	ppb	12:13:19
1	Cr 267.716†	15677.3	15533.9	360.43	µg/L	360.43	ppb	12:12:59
1	Cu 324.752†	7901.6	4119.4	49.513	µg/L	49.513	ppb	12:12:59
1	Mn 257.610†	686376.4	676664.5	2516.9	µg/L	2516.9	ppb	12:12:53
1	Mo 202.031†	74.1	55.9	12.085	µg/L	12.085	ppb	12:13:19
1	Ni 231.604†	3302.6	2919.5	185.62	µg/L	185.62	ppb	12:13:19
1	P 214.914†	560.0	349.4	746.79	µg/L	746.79	ppb	12:13:19
1	Pb 220.353†	407.3	345.5	100.03	µg/L	100.03	ppb	12:13:19
1	S 181.975 Axial†	121.8	94.5	541.61	µg/L	541.61	ppb	12:13:19
1	Sb 206.836†	27.7	4.9	0.4133	µg/L	0.4133	ppb	12:13:19
1	Se 196.026†	-324.5	-332.2	-16.321	µg/L	-16.321	ppb	12:13:19
1	SiO2†	422467.5	414094.4	87404	µg/L	87404	ppb	12:12:53
1	Si 251.611†	488317.1	480968.3	40342	µg/L	40342	ppb	12:12:53
1	Sn 189.927†	-67.8	-90.2	-34.245	µg/L	-34.245	ppb	12:13:19
1	Ti 334.940†	1751807.8	1725763.3	4303.1	µg/L	4303.1	ppb	12:12:53
1	Tl 190.801†	-37.1	-13.5	16.825	µg/L	16.825	ppb	12:13:19
1	U 409.014†	-846.7	-601.5	-76.867	µg/L	-76.867	ppb	12:12:53
1	V 292.402†	16356.1	16242.3	209.86	µg/L	209.86	ppb	12:12:59
1	Zn 213.857†	12941.7	12083.7	344.26	µg/L	344.26	ppb	12:12:59
2	Sc RADIAL	78401.1	78401.1	102	%			12:11:53
2	Al 396.153Radial†	115451.2	113150.4	78622	µg/L	78622	ppb	12:11:53
2	Ca 317.933Radial†	20027.2	19371.6	15254	µg/L	15254	ppb	12:12:14
2	Fe 238.204 Radial†	9507.6	9300.0	133520	µg/L	133520	ppb	12:12:14
2	K 766.490 Radial†	21452.0	20607.3	13680	µg/L	13680	ppb	12:11:53
2	Mg 279.077 IEC†	1368.1	1332.2	14376	µg/L	14376	ppb	12:12:14
2	Na 589.592 Radial†	2973.0	2368.1	680.04	µg/L	680.04	ppb	12:12:14
2	Sr 421.552†	25000.2	23938.2	152.10	µg/L	152.10	ppb	12:11:53
2	Sc 361.383	1966452.5	1966452.5	101.19	%			12:13:27
2	Y 371.029	1254184.1	1254184.1	102.07	%			12:13:27
2	Ag 328.068†	-1317.7	-1247.2	-1.8817	µg/L	-1.8817	ppb	12:13:33
2	As 188.979†	9.0	8.3	26.170	µg/L	26.170	ppb	12:13:53
2	B 249.677†	1962.6	1824.3	19.663	µg/L	19.663	ppb	12:13:33
2	Ba 233.527†	29589.9	29257.5	850.39	µg/L	850.39	ppb	12:13:33
2	Be 313.107†	15989.1	11962.2	6.6940	µg/L	6.6940	ppb	12:13:33
2	Cd 226.502†	416.3	546.9	1.1945	µg/L	1.1945	ppb	12:13:53
2	Co 228.616†	867.3	902.1	40.812	µg/L	40.812	ppb	12:13:53
2	Cr 267.716†	15655.3	15554.5	360.90	µg/L	360.90	ppb	12:13:33
2	Cu 324.752†	7898.0	4137.2	49.665	µg/L	49.665	ppb	12:13:33
2	Mn 257.610†	684420.1	676584.0	2516.6	µg/L	2516.6	ppb	12:13:27
2	Mo 202.031†	73.7	55.6	12.057	µg/L	12.057	ppb	12:13:53
2	Ni 231.604†	3295.6	2921.5	185.75	µg/L	185.75	ppb	12:13:53
2	P 214.914†	546.9	338.0	719.47	µg/L	719.47	ppb	12:13:53
2	Pb 220.353†	403.6	343.0	99.284	µg/L	99.284	ppb	12:13:53

2	S 181.975 Axial†	120.5	93.6	536.42 µg/L	536.42 ppb	12:13:53
2	Sb 206.836†	32.3	9.5	5.5176 µg/L	5.5176 ppb	12:13:53
2	Se 196.026†	-318.3	-327.0	-7.5923 µg/L	-7.5923 ppb	12:13:53
2	SiO2†	421425.5	414205.1	87428 µg/L	87428 ppb	12:13:27
2	Si 251.611†	487275.7	481257.3	40366 µg/L	40366 ppb	12:13:27
2	Sn 189.927†	-61.2	-83.9	-30.549 µg/L	-30.549 ppb	12:13:53
2	Ti 334.940†	1747477.9	1726213.2	4304.2 µg/L	4304.2 ppb	12:13:27
2	Tl 190.801†	-40.9	-17.4	10.115 µg/L	10.115 ppb	12:13:53
2	U 409.014†	-746.1	-504.3	-67.618 µg/L	-67.618 ppb	12:13:27
2	V 292.402†	16311.2	16242.1	209.88 µg/L	209.88 ppb	12:13:33
2	Zn 213.857†	12883.0	12060.6	343.58 µg/L	343.58 ppb	12:13:33
3	Sc RADIAL	78906.5	78906.5	103 %		12:12:19
3	Al 396.153Radial†	115955.1	112916.4	78460 µg/L	78460 ppb	12:12:19
3	Ca 317.933Radial†	20055.5	19273.5	15176 µg/L	15176 ppb	12:12:40
3	Fe 238.204 Radial†	9516.5	9249.0	132780 µg/L	132780 ppb	12:12:40
3	K 766.490 Radial†	21537.4	20555.8	13646 µg/L	13646 ppb	12:12:19
3	Mg 279.077 IEC†	1365.7	1321.3	14258 µg/L	14258 ppb	12:12:40
3	Na 589.592 Radial†	2957.1	2334.0	670.24 µg/L	670.24 ppb	12:12:40
3	Sr 421.552†	25161.6	23938.5	152.10 µg/L	152.10 ppb	12:12:19
3	Sc 361.383	1967274.0	1967274.0	101.23 %		12:14:01
3	Y 371.029	1255560.7	1255560.7	102.18 %		12:14:01
3	Ag 328.068†	-1265.9	-1195.4	-1.4853 µg/L	-1.4853 ppb	12:14:07
3	As 188.979†	8.3	7.6	24.539 µg/L	24.539 ppb	12:14:27
3	B 249.677†	1919.6	1781.1	17.922 µg/L	17.922 ppb	12:14:07
3	Ba 233.527†	28827.7	28492.3	828.14 µg/L	828.14 ppb	12:14:07
3	Be 313.107†	15629.4	11600.2	6.4720 µg/L	6.4720 ppb	12:14:07
3	Cd 226.502†	379.2	510.1	0.1847 µg/L	0.1847 ppb	12:14:27
3	Co 228.616†	825.7	860.7	38.693 µg/L	38.693 ppb	12:14:27
3	Cr 267.716†	15158.0	15056.8	349.36 µg/L	349.36 ppb	12:14:07
3	Cu 324.752†	7760.1	3997.7	48.515 µg/L	48.515 ppb	12:14:07
3	Mn 257.610†	673697.0	665708.7	2476.4 µg/L	2476.4 ppb	12:14:01
3	Mo 202.031†	73.4	55.3	11.995 µg/L	11.995 ppb	12:14:27
3	Ni 231.604†	3138.6	2765.1	175.89 µg/L	175.89 ppb	12:14:27
3	P 214.914†	540.2	331.2	703.83 µg/L	703.83 ppb	12:14:27
3	Pb 220.353†	404.5	343.7	99.508 µg/L	99.508 ppb	12:14:27
3	S 181.975 Axial†	109.8	83.0	475.60 µg/L	475.60 ppb	12:14:27
3	Sb 206.836†	31.6	8.8	4.8721 µg/L	4.8721 ppb	12:14:27
3	Se 196.026†	-293.5	-302.4	28.588 µg/L	28.588 ppb	12:14:27
3	SiO2†	415994.5	408666.1	86258 µg/L	86258 ppb	12:14:01
3	Si 251.611†	480923.0	474780.7	39823 µg/L	39823 ppb	12:14:01
3	Sn 189.927†	-53.1	-75.8	-25.938 µg/L	-25.938 ppb	12:14:27
3	Ti 334.940†	1716027.6	1694423.5	4225.0 µg/L	4225.0 ppb	12:14:01
3	Tl 190.801†	-38.7	-15.1	13.119 µg/L	13.119 ppb	12:14:27
3	U 409.014†	-693.1	-451.7	-62.491 µg/L	-62.491 ppb	12:14:01
3	V 292.402†	15823.2	15753.3	203.74 µg/L	203.74 ppb	12:14:07
3	Zn 213.857†	12576.2	11752.2	334.68 µg/L	334.68 ppb	12:14:07

Mean Data: 244227005|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1968521.7	101.29	%	0.149				0.15%
Sc RADIAL	78641.2	102	%	0.3				0.32%
Y 371.029	1256150.8	102.23	%	0.189				0.18%
Ag 328.068†	-1245.6	-1.8986	µg/L	0.42197	-1.8986	ppb	0.42197	22.23%
Al 396.153Radial†	112963.8	78493	µg/L	116.7	78493	ppb	116.7	0.15%
As 188.979†	8.2	25.950	µg/L	1.3146	25.950	ppb	1.3146	5.07%
B 249.677†	1812.7	19.243	µg/L	1.1689	19.243	ppb	1.1689	6.07%
Ba 233.527†	29010.5	843.21	µg/L	13.048	843.21	ppb	13.048	1.55%
Be 313.107†	11814.1	6.6010	µg/L	0.11530	6.6010	ppb	0.11530	1.75%
Ca 317.933Radial†	19331.5	15222	µg/L	40.5	15222	ppb	40.5	0.27%
Cd 226.502†	534.3	0.8550	µg/L	0.58049	0.8550	ppb	0.58049	67.89%
Co 228.616†	894.1	40.425	µg/L	1.5744	40.425	ppb	1.5744	3.89%
Cr 267.716†	15381.7	356.90	µg/L	6.534	356.90	ppb	6.534	1.83%
Cu 324.752†	4084.8	49.231	µg/L	0.6247	49.231	ppb	0.6247	1.27%
Fe 238.204 Radial†	9279.8	133230	µg/L	389.0	133230	ppb	389.0	0.29%
K 766.490 Radial†	20563.1	13651	µg/L	27.2	13651	ppb	27.2	0.20%
Mg 279.077 IEC†	1326.8	14317	µg/L	58.8	14317	ppb	58.8	0.41%
Mn 257.610†	672985.7	2503.3	µg/L	23.33	2503.3	ppb	23.33	0.93%
Mo 202.031†	55.6	12.046	µg/L	0.0462	12.046	ppb	0.0462	0.38%
Na 589.592 Radial†	2351.6	675.30	µg/L	4.908	675.30	ppb	4.908	0.73%

Ni 231.604†	2868.7	182.42	µg/L	5.657	182.42	ppb	5.657	3.10%
P 214.914†	339.5	723.36	µg/L	21.744	723.36	ppb	21.744	3.01%
Pb 220.353†	344.0	99.606	µg/L	0.3804	99.606	ppb	0.3804	0.38%
S 181.975 Axial†	90.3	517.88	µg/L	36.705	517.88	ppb	36.705	7.09%
Sb 206.836†	7.7	3.6010	µg/L	2.77945	3.6010	ppb	2.77945	77.19%
Se 196.026†	-320.5	1.5581	µg/L	23.81157	1.5581	ppb	23.81157	>999.9%
SiO2†	412321.9	87030	µg/L	668.4	87030	ppb	668.4	0.77%
Si 251.611†	479002.1	40177	µg/L	306.9	40177	ppb	306.9	0.76%
Sn 189.927†	-83.3	-30.244	µg/L	4.1621	-30.244	ppb	4.1621	13.76%
Sr 421.552†	23938.1	152.10	µg/L	0.003	152.10	ppb	0.003	0.00%
Ti 334.940†	1715466.7	4277.4	µg/L	45.45	4277.4	ppb	45.45	1.06%
Tl 190.801†	-15.3	13.353	µg/L	3.3614	13.353	ppb	3.3614	25.17%
U 409.014†	-519.2	-68.992	µg/L	7.2859	-68.992	ppb	7.2859	10.56%
V 292.402†	16079.2	207.83	µg/L	3.540	207.83	ppb	3.540	1.70%
Zn 213.857†	11965.5	340.84	µg/L	5.349	340.84	ppb	5.349	1.57%

Sequence No.: 46
Sample ID: 244227006|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 338
Date Collected: 1/27/2010 12:14:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227006|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78460.1	78460.1	102	%			12:15:09
1	Al 396.153Radial†	53808.4	52711.3	36626	µg/L	36626	ppb	12:15:09
1	Ca 317.933Radial†	10732.4	10256.4	8076.1	µg/L	8076.1	ppb	12:15:30
1	Fe 238.204 Radial†	7868.5	7688.1	110370	µg/L	110370	ppb	12:15:30
1	K 766.490 Radial†	8958.9	8359.6	5549.4	µg/L	5549.4	ppb	12:15:09
1	Mg 279.077 IEC†	674.9	652.5	6992.9	µg/L	6992.9	ppb	12:15:30
1	Na 589.592 Radial†	2412.8	1817.4	521.89	µg/L	521.89	ppb	12:15:09
1	Sr 421.552†	11323.4	10529.0	66.900	µg/L	66.900	ppb	12:15:09
1	Sc 361.383	1968045.1	1968045.1	101.27	%			12:16:34
1	Y 371.029	1268851.8	1268851.8	103.26	%			12:16:34
1	Ag 328.068†	-1055.5	-987.2	-1.5135	µg/L	-1.5135	ppb	12:16:40
1	As 188.979†	4.9	4.3	15.896	µg/L	15.896	ppb	12:17:00
1	B 249.677†	1518.8	1384.6	9.8840	µg/L	9.8840	ppb	12:16:40
1	Ba 233.527†	14028.8	13867.6	403.10	µg/L	403.10	ppb	12:16:40
1	Be 313.107†	13332.2	9325.7	4.8832	µg/L	4.8832	ppb	12:16:40
1	Cd 226.502†	330.2	461.5	1.1604	µg/L	1.1604	ppb	12:17:00
1	Co 228.616†	442.6	482.1	17.771	µg/L	17.771	ppb	12:17:00
1	Cr 267.716†	3106.3	3150.2	73.138	µg/L	73.138	ppb	12:17:00
1	Cu 324.752†	5742.7	2002.5	30.399	µg/L	30.399	ppb	12:16:40
1	Mn 257.610†	631234.2	623517.0	2317.8	µg/L	2317.8	ppb	12:16:34
1	Mo 202.031†	65.6	47.5	10.166	µg/L	10.166	ppb	12:17:00
1	Ni 231.604†	1091.2	742.1	48.158	µg/L	48.158	ppb	12:17:00
1	P 214.914†	514.3	305.4	650.13	µg/L	650.13	ppb	12:17:00
1	Pb 220.353†	331.0	270.9	76.857	µg/L	76.857	ppb	12:17:00
1	S 181.975 Axial†	64.4	38.1	218.14	µg/L	218.14	ppb	12:17:00
1	Sb 206.836†	24.3	1.6	0.5139	µg/L	0.5139	ppb	12:17:00
1	Se 196.026†	-264.7	-273.8	-10.872	µg/L	-10.872	ppb	12:17:00
1	SiO2†	306454.8	300337.4	63393	µg/L	63393	ppb	12:16:34
1	Si 251.611†	353692.3	348957.5	29269	µg/L	29269	ppb	12:16:34
1	Sn 189.927†	-26.0	-49.1	-15.371	µg/L	-15.371	ppb	12:17:00
1	Ti 334.940†	1721120.0	1698788.0	4236.3	µg/L	4236.3	ppb	12:16:34
1	Tl 190.801†	-50.0	-26.3	-5.0128	µg/L	-5.0128	ppb	12:17:00
1	U 409.014†	-626.1	-385.2	-52.597	µg/L	-52.597	ppb	12:16:34
1	V 292.402†	8952.5	8962.5	117.47	µg/L	117.47	ppb	12:16:40
1	Zn 213.857†	15685.7	14818.0	426.12	µg/L	426.12	ppb	12:16:40
2	Sc RADIAL	77974.8	77974.8	102	%			12:15:35
2	Al 396.153Radial†	53409.3	52646.0	36581	µg/L	36581	ppb	12:15:35
2	Ca 317.933Radial†	10760.9	10349.9	8149.7	µg/L	8149.7	ppb	12:15:56
2	Fe 238.204 Radial†	7860.1	7727.7	110940	µg/L	110940	ppb	12:15:56
2	K 766.490 Radial†	8941.5	8397.1	5574.3	µg/L	5574.3	ppb	12:15:35
2	Mg 279.077 IEC†	676.1	657.8	7050.3	µg/L	7050.3	ppb	12:15:56
2	Na 589.592 Radial†	2433.7	1852.7	532.03	µg/L	532.03	ppb	12:15:35
2	Sr 421.552†	11235.1	10511.0	66.786	µg/L	66.786	ppb	12:15:35
2	Sc 361.383	1972665.2	1972665.2	101.51	%			12:17:08
2	Y 371.029	1271347.0	1271347.0	103.46	%			12:17:08
2	Ag 328.068†	-1028.4	-958.0	-1.2113	µg/L	-1.2113	ppb	12:17:14
2	As 188.979†	7.8	7.1	22.365	µg/L	22.365	ppb	12:17:34
2	B 249.677†	1499.8	1362.3	8.5035	µg/L	8.5035	ppb	12:17:14
2	Ba 233.527†	13936.6	13744.3	399.51	µg/L	399.51	ppb	12:17:14
2	Be 313.107†	13332.8	9295.5	4.8603	µg/L	4.8603	ppb	12:17:14
2	Cd 226.502†	334.7	465.2	1.2042	µg/L	1.2042	ppb	12:17:34
2	Co 228.616†	442.6	481.0	17.701	µg/L	17.701	ppb	12:17:34
2	Cr 267.716†	3092.4	3129.3	72.652	µg/L	72.652	ppb	12:17:34
2	Cu 324.752†	5715.0	1962.0	30.173	µg/L	30.173	ppb	12:17:14
2	Mn 257.610†	633499.5	624288.8	2320.7	µg/L	2320.7	ppb	12:17:08
2	Mo 202.031†	66.4	48.2	10.269	µg/L	10.269	ppb	12:17:34
2	Ni 231.604†	1091.8	740.2	48.045	µg/L	48.045	ppb	12:17:34
2	P 214.914†	514.0	303.9	646.08	µg/L	646.08	ppb	12:17:34
2	Pb 220.353†	321.1	260.4	73.761	µg/L	73.761	ppb	12:17:34

2	S 181.975 Axial†	70.6	44.0	252.31 µg/L	252.31 ppb	12:17:34
2	Sb 206.836†	24.1	1.4	0.2801 µg/L	0.2801 ppb	12:17:34
2	Se 196.026†	-255.1	-263.8	7.1535 µg/L	7.1535 ppb	12:17:34
2	SiO2†	307456.2	300615.2	63452 µg/L	63452 ppb	12:17:08
2	Si 251.611†	354778.6	349209.7	29291 µg/L	29291 ppb	12:17:08
2	Sn 189.927†	-32.0	-54.9	-18.674 µg/L	-18.674 ppb	12:17:34
2	Ti 334.940†	1727088.1	1700687.0	4241.0 µg/L	4241.0 ppb	12:17:08
2	Tl 190.801†	-44.1	-20.4	5.2133 µg/L	5.2133 ppb	12:17:34
2	U 409.014†	-657.5	-414.8	-55.500 µg/L	-55.500 ppb	12:17:08
2	V 292.402†	8900.5	8890.6	116.61 µg/L	116.61 ppb	12:17:14
2	Zn 213.857†	15650.3	14746.7	424.01 µg/L	424.01 ppb	12:17:14
3	Sc RADIAL	77899.4	77899.4	101 %		12:16:01
3	Al 396.153Radial†	53547.1	52832.9	36711 µg/L	36711 ppb	12:16:01
3	Ca 317.933Radial†	10730.8	10330.4	8134.4 µg/L	8134.4 ppb	12:16:21
3	Fe 238.204 Radial†	7840.8	7716.2	110780 µg/L	110780 ppb	12:16:21
3	K 766.490 Radial†	8978.8	8442.3	5604.3 µg/L	5604.3 ppb	12:16:01
3	Mg 279.077 IEC†	682.4	664.7	7125.1 µg/L	7125.1 ppb	12:16:21
3	Na 589.592 Radial†	2424.7	1846.1	530.14 µg/L	530.14 ppb	12:16:01
3	Sr 421.552†	11236.2	10522.7	66.860 µg/L	66.860 ppb	12:16:01
3	Sc 361.383	1962424.1	1962424.1	100.98 %		12:17:42
3	Y 371.029	1265059.4	1265059.4	102.95 %		12:17:42
3	Ag 328.068†	-1034.6	-969.5	-1.3454 µg/L	-1.3454 ppb	12:17:47
3	As 188.979†	8.3	7.7	23.789 µg/L	23.789 ppb	12:18:08
3	B 249.677†	1467.3	1337.9	7.3910 µg/L	7.3910 ppb	12:17:47
3	Ba 233.527†	13630.2	13512.5	392.78 µg/L	392.78 ppb	12:17:47
3	Be 313.107†	13038.5	9072.6	4.7312 µg/L	4.7312 ppb	12:17:47
3	Cd 226.502†	311.2	443.7	0.5866 µg/L	0.5866 ppb	12:18:08
3	Co 228.616†	415.3	456.3	16.483 µg/L	16.483 ppb	12:18:08
3	Cr 267.716†	2850.4	2905.6	67.461 µg/L	67.461 ppb	12:18:08
3	Cu 324.752†	5715.8	1992.2	30.377 µg/L	30.377 ppb	12:17:47
3	Mn 257.610†	620911.3	615079.6	2286.7 µg/L	2286.7 ppb	12:17:42
3	Mo 202.031†	69.5	51.6	10.689 µg/L	10.689 ppb	12:18:08
3	Ni 231.604†	1042.9	697.3	45.345 µg/L	45.345 ppb	12:18:08
3	P 214.914†	494.0	286.7	604.89 µg/L	604.89 ppb	12:18:08
3	Pb 220.353†	321.0	261.9	74.231 µg/L	74.231 ppb	12:18:08
3	S 181.975 Axial†	65.2	39.0	223.59 µg/L	223.59 ppb	12:18:08
3	Sb 206.836†	24.3	1.7	0.6823 µg/L	0.6823 ppb	12:18:08
3	Se 196.026†	-243.1	-253.2	23.173 µg/L	23.173 ppb	12:18:08
3	SiO2†	302715.7	297501.4	62795 µg/L	62795 ppb	12:17:42
3	Si 251.611†	349449.2	345755.9	29001 µg/L	29001 ppb	12:17:42
3	Sn 189.927†	-35.2	-58.3	-20.657 µg/L	-20.657 ppb	12:18:08
3	Ti 334.940†	1690298.6	1673133.5	4172.3 µg/L	4172.3 ppb	12:17:42
3	Tl 190.801†	-43.4	-19.9	5.3318 µg/L	5.3318 ppb	12:18:08
3	U 409.014†	-649.2	-410.0	-55.018 µg/L	-55.018 ppb	12:17:42
3	V 292.402†	8651.2	8689.4	114.09 µg/L	114.09 ppb	12:17:47
3	Zn 213.857†	15312.5	14492.7	416.62 µg/L	416.62 ppb	12:17:47

Mean Data: 244227006|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1967711.5	101.25	%	0.264				0.26%
Sc RADIAL	78111.5	102	%	0.4				0.39%
Y 371.029	1268419.4	103.22	%	0.258				0.25%
Ag 328.068†	-971.6	-1.3567	µg/L	0.15140	-1.3567	ppb	0.15140	11.16%
Al 396.153Radial†	52730.1	36639	µg/L	65.9	36639	ppb	65.9	0.18%
As 188.979†	6.4	20.684	µg/L	4.2065	20.684	ppb	4.2065	20.34%
B 249.677†	1361.6	8.5929	µg/L	1.24892	8.5929	ppb	1.24892	14.53%
Ba 233.527†	13708.1	398.46	µg/L	5.241	398.46	ppb	5.241	1.32%
Be 313.107†	9231.3	4.8249	µg/L	0.08194	4.8249	ppb	0.08194	1.70%
Ca 317.933Radial†	10312.2	8120.1	µg/L	38.84	8120.1	ppb	38.84	0.48%
Cd 226.502†	456.8	0.9837	µg/L	0.34461	0.9837	ppb	0.34461	35.03%
Co 228.616†	473.1	17.318	µg/L	0.7244	17.318	ppb	0.7244	4.18%
Cr 267.716†	3061.7	71.084	µg/L	3.1466	71.084	ppb	3.1466	4.43%
Cu 324.752†	1985.6	30.316	µg/L	0.1247	30.316	ppb	0.1247	0.41%
Fe 238.204 Radial†	7710.7	110700	µg/L	292.9	110700	ppb	292.9	0.26%
K 766.490 Radial†	8399.7	5576.0	µg/L	27.52	5576.0	ppb	27.52	0.49%
Mg 279.077 IEC†	658.3	7056.1	µg/L	66.29	7056.1	ppb	66.29	0.94%
Mn 257.610†	620961.8	2308.4	µg/L	18.87	2308.4	ppb	18.87	0.82%
Mo 202.031†	49.1	10.375	µg/L	0.2771	10.375	ppb	0.2771	2.67%
Na 589.592 Radial†	1838.7	528.02	µg/L	5.394	528.02	ppb	5.394	1.02%

Ni 231.604†	726.5	47.183	µg/L	1.5920	47.183	ppb	1.5920	3.37%
P 214.914†	298.7	633.70	µg/L	25.037	633.70	ppb	25.037	3.95%
Pb 220.353†	264.4	74.950	µg/L	1.6683	74.950	ppb	1.6683	2.23%
S 181.975 Axial†	40.4	231.35	µg/L	18.359	231.35	ppb	18.359	7.94%
Sb 206.836†	1.6	0.4921	µg/L	0.20201	0.4921	ppb	0.20201	41.05%
Se 196.026†	-263.6	6.4849	µg/L	17.03232	6.4849	ppb	17.03232	262.65%
SiO2†	299484.7	63213	µg/L	363.7	63213	ppb	363.7	0.58%
Si 251.611†	347974.4	29187	µg/L	161.5	29187	ppb	161.5	0.55%
Sn 189.927†	-54.1	-18.234	µg/L	2.6702	-18.234	ppb	2.6702	14.64%
Sr 421.552†	10520.9	66.849	µg/L	0.0581	66.849	ppb	0.0581	0.09%
Ti 334.940†	1690869.5	4216.6	µg/L	38.38	4216.6	ppb	38.38	0.91%
Tl 190.801†	-22.2	1.8441	µg/L	5.93852	1.8441	ppb	5.93852	322.03%
U 409.014†	-403.3	-54.372	µg/L	1.5552	-54.372	ppb	1.5552	2.86%
V 292.402†	8847.5	116.05	µg/L	1.759	116.05	ppb	1.759	1.52%
Zn 213.857†	14685.8	422.25	µg/L	4.987	422.25	ppb	4.987	1.18%

Sequence No.: 47
Sample ID: 244227007|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 339
Date Collected: 1/27/2010 12:18:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227007|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77296.5	77296.5	101	%			12:18:50
1	Al 396.153Radial†	33165.5	32988.9	22922	µg/L	22922	ppb	12:18:50
1	Ca 317.933Radial†	7538.5	7240.3	5701.2	µg/L	5701.2	ppb	12:18:50
1	Fe 238.204 Radial†	6427.6	6372.0	91480	µg/L	91480	ppb	12:19:10
1	K 766.490 Radial†	5811.0	5363.2	3560.3	µg/L	3560.3	ppb	12:18:50
1	Mg 279.077 IEC†	409.2	398.3	4243.0	µg/L	4243.0	ppb	12:19:10
1	Na 589.592 Radial†	4002.6	3433.0	985.82	µg/L	985.82	ppb	12:18:50
1	Sr 421.552†	6142.6	5547.0	35.245	µg/L	35.245	ppb	12:18:50
1	Sc 361.383	1965145.6	1965145.6	101.12	%			12:20:15
1	Y 371.029	1292570.4	1292570.4	105.19	%			12:20:15
1	Ag 328.068†	-914.5	-849.3	-1.8469	µg/L	-1.8469	ppb	12:20:20
1	As 188.979†	1.7	1.1	7.5228	µg/L	7.5228	ppb	12:20:41
1	B 249.677†	1180.3	1052.0	3.6470	µg/L	3.6470	ppb	12:20:20
1	Ba 233.527†	7884.9	7812.2	227.05	µg/L	227.05	ppb	12:20:20
1	Be 313.107†	13323.2	9336.3	4.8335	µg/L	4.8335	ppb	12:20:20
1	Cd 226.502†	272.6	405.0	1.6525	µg/L	1.6525	ppb	12:20:20
1	Co 228.616†	276.0	317.9	8.3981	µg/L	8.3981	ppb	12:20:41
1	Cr 267.716†	5382.3	5405.5	125.41	µg/L	125.41	ppb	12:20:20
1	Cu 324.752†	4409.9	692.9	17.925	µg/L	17.925	ppb	12:20:20
1	Mn 257.610†	714145.5	706430.3	2621.7	µg/L	2621.7	ppb	12:20:15
1	Mo 202.031†	54.5	36.7	8.0837	µg/L	8.0837	ppb	12:20:41
1	Ni 231.604†	1430.7	1079.5	69.180	µg/L	69.180	ppb	12:20:41
1	P 214.914†	524.9	316.6	689.37	µg/L	689.37	ppb	12:20:41
1	Pb 220.353†	170.2	112.4	30.680	µg/L	30.680	ppb	12:20:41
1	S 181.975 Axial†	32.4	6.5	37.506	µg/L	37.506	ppb	12:20:41
1	Sb 206.836†	21.0	-1.7	-3.5761	µg/L	-3.5761	ppb	12:20:41
1	Se 196.026†	-211.8	-221.9	-0.6545	µg/L	-0.6545	ppb	12:20:41
1	SiO2†	263166.4	257974.7	54452	µg/L	54452	ppb	12:20:15
1	Si 251.611†	303621.2	299956.0	25159	µg/L	25159	ppb	12:20:15
1	Sn 189.927†	-14.4	-37.7	-11.496	µg/L	-11.496	ppb	12:20:41
1	Ti 334.940†	1779292.1	1758823.8	4386.2	µg/L	4386.2	ppb	12:20:15
1	Tl 190.801†	-47.6	-24.0	2.6129	µg/L	2.6129	ppb	12:20:41
1	U 409.014†	-1420.1	-1171.4	-124.85	µg/L	-124.85	ppb	12:20:15
1	V 292.402†	3656.7	3738.4	51.543	µg/L	51.543	ppb	12:20:20
1	Zn 213.857†	15589.0	14745.1	424.97	µg/L	424.97	ppb	12:20:20
2	Sc RADIAL	77591.7	77591.7	101	%			12:19:16
2	Al 396.153Radial†	33323.1	33019.5	22943	µg/L	22943	ppb	12:19:16
2	Ca 317.933Radial†	7592.7	7265.5	5721.0	µg/L	5721.0	ppb	12:19:16
2	Fe 238.204 Radial†	6466.6	6386.4	91686	µg/L	91686	ppb	12:19:36
2	K 766.490 Radial†	5833.6	5363.6	3560.5	µg/L	3560.5	ppb	12:19:16
2	Mg 279.077 IEC†	407.1	394.8	4204.3	µg/L	4204.3	ppb	12:19:36
2	Na 589.592 Radial†	4050.7	3465.5	995.16	µg/L	995.16	ppb	12:19:16
2	Sr 421.552†	6131.7	5513.0	35.029	µg/L	35.029	ppb	12:19:16
2	Sc 361.383	1973213.5	1973213.5	101.53	%			12:20:49
2	Y 371.029	1297782.4	1297782.4	105.61	%			12:20:49
2	Ag 328.068†	-909.5	-840.7	-1.7560	µg/L	-1.7560	ppb	12:20:54
2	As 188.979†	4.4	3.8	13.710	µg/L	13.710	ppb	12:21:15
2	B 249.677†	1153.5	1020.9	2.0227	µg/L	2.0227	ppb	12:20:54
2	Ba 233.527†	7782.7	7679.6	223.20	µg/L	223.20	ppb	12:20:54
2	Be 313.107†	13279.5	9239.3	4.7687	µg/L	4.7687	ppb	12:20:54
2	Cd 226.502†	253.3	384.9	1.0362	µg/L	1.0362	ppb	12:20:54
2	Co 228.616†	267.4	308.3	7.8844	µg/L	7.8844	ppb	12:21:15
2	Cr 267.716†	5350.6	5352.5	124.18	µg/L	124.18	ppb	12:20:54
2	Cu 324.752†	4449.6	714.2	18.114	µg/L	18.114	ppb	12:20:54
2	Mn 257.610†	715786.8	705159.1	2617.0	µg/L	2617.0	ppb	12:20:49
2	Mo 202.031†	63.8	45.7	9.2205	µg/L	9.2205	ppb	12:21:15
2	Ni 231.604†	1415.0	1058.2	67.843	µg/L	67.843	ppb	12:21:15
2	P 214.914†	526.3	315.8	687.41	µg/L	687.41	ppb	12:21:15
2	Pb 220.353†	176.4	117.8	32.254	µg/L	32.254	ppb	12:21:15

2	S 181.975 Axial†	30.5	4.5	25.810 µg/L	25.810 ppb	12:21:15
2	Sb 206.836†	21.3	-1.4	-3.2162 µg/L	-3.2162 ppb	12:21:15
2	Se 196.026†	-214.3	-223.5	-2.3078 µg/L	-2.3078 ppb	12:21:15
2	SiO2†	263919.2	257652.0	54383 µg/L	54383 ppb	12:20:49
2	Si 251.611†	304377.7	299473.4	25119 µg/L	25119 ppb	12:20:49
2	Sn 189.927†	-16.5	-39.6	-12.610 µg/L	-12.610 ppb	12:21:15
2	Ti 334.940†	1783585.9	1755858.2	4378.8 µg/L	4378.8 ppb	12:20:49
2	Tl 190.801†	-51.7	-27.9	-4.2312 µg/L	-4.2312 ppb	12:21:15
2	U 409.014†	-1496.5	-1240.9	-131.51 µg/L	-131.51 ppb	12:20:49
2	V 292.402†	3643.1	3710.2	51.202 µg/L	51.202 ppb	12:20:54
2	Zn 213.857†	15472.9	14567.8	419.80 µg/L	419.80 ppb	12:20:54
3	Sc RADIAL	77091.0	77091.0	100 %		12:19:42
3	Al 396.153Radial†	32974.3	32886.2	22851 µg/L	22851 ppb	12:19:42
3	Ca 317.933Radial†	7474.5	7196.5	5666.7 µg/L	5666.7 ppb	12:19:42
3	Fe 238.204 Radial†	6495.1	6456.4	92691 µg/L	92691 ppb	12:20:02
3	K 766.490 Radial†	5788.5	5356.1	3555.6 µg/L	3555.6 ppb	12:19:42
3	Mg 279.077 IEC†	411.6	401.9	4280.6 µg/L	4280.6 ppb	12:20:02
3	Na 589.592 Radial†	4041.7	3482.5	1000.1 µg/L	1000.1 ppb	12:19:42
3	Sr 421.552†	6033.9	5455.0	34.660 µg/L	34.660 ppb	12:19:42
3	Sc 361.383	1967341.9	1967341.9	101.23 %		12:21:22
3	Y 371.029	1292555.1	1292555.1	105.19 %		12:21:22
3	Ag 328.068†	-884.7	-818.9	-1.4959 µg/L	-1.4959 ppb	12:21:28
3	As 188.979†	6.1	5.5	17.804 µg/L	17.804 ppb	12:21:48
3	B 249.677†	1147.7	1018.6	1.3785 µg/L	1.3785 ppb	12:21:28
3	Ba 233.527†	7635.3	7556.9	219.63 µg/L	219.63 ppb	12:21:28
3	Be 313.107†	13111.6	9112.5	4.7090 µg/L	4.7090 ppb	12:21:28
3	Cd 226.502†	214.1	346.9	-0.2005 µg/L	-0.2005 ppb	12:21:28
3	Co 228.616†	247.4	289.4	6.9935 µg/L	6.9935 ppb	12:21:48
3	Cr 267.716†	5169.3	5189.2	120.39 µg/L	120.39 ppb	12:21:28
3	Cu 324.752†	4422.6	700.5	18.151 µg/L	18.151 ppb	12:21:28
3	Mn 257.610†	703376.0	695003.4	2579.7 µg/L	2579.7 ppb	12:21:22
3	Mo 202.031†	56.1	38.2	8.3215 µg/L	8.3215 ppb	12:21:48
3	Ni 231.604†	1324.5	973.0	62.489 µg/L	62.489 ppb	12:21:48
3	P 214.914†	501.0	292.4	630.48 µg/L	630.48 ppb	12:21:48
3	Pb 220.353†	164.2	106.3	28.852 µg/L	28.852 ppb	12:21:48
3	S 181.975 Axial†	35.4	9.5	54.211 µg/L	54.211 ppb	12:21:48
3	Sb 206.836†	17.9	-4.7	-6.9164 µg/L	-6.9164 ppb	12:21:48
3	Se 196.026†	-197.2	-207.3	27.085 µg/L	27.085 ppb	12:21:48
3	SiO2†	260506.4	255056.5	53836 µg/L	53836 ppb	12:21:22
3	Si 251.611†	300249.6	296290.2	24852 µg/L	24852 ppb	12:21:22
3	Sn 189.927†	-16.3	-39.5	-12.463 µg/L	-12.463 ppb	12:21:48
3	Ti 334.940†	1747816.6	1725767.1	4303.8 µg/L	4303.8 ppb	12:21:22
3	Tl 190.801†	-45.0	-21.4	6.1424 µg/L	6.1424 ppb	12:21:48
3	U 409.014†	-1474.9	-1223.9	-130.03 µg/L	-130.03 ppb	12:21:22
3	V 292.402†	3550.4	3629.3	50.235 µg/L	50.235 ppb	12:21:28
3	Zn 213.857†	15221.2	14364.6	413.85 µg/L	413.85 ppb	12:21:28

Mean Data: 244227007|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1968567.0	101.30	%	0.215				0.21%
Sc RADIAL	77326.4	101	%	0.3				0.33%
Y 371.029	1294302.6	105.33	%	0.245				0.23%
Ag 328.068†	-836.3	-1.6996	µg/L	0.18214	-1.6996	ppb	0.18214	10.72%
Al 396.153Radial†	32964.9	22906	µg/L	48.5	22906	ppb	48.5	0.21%
As 188.979†	3.5	13.012	µg/L	5.1758	13.012	ppb	5.1758	39.78%
B 249.677†	1030.5	2.3494	µg/L	1.16902	2.3494	ppb	1.16902	49.76%
Ba 233.527†	7682.9	223.29	µg/L	3.711	223.29	ppb	3.711	1.66%
Be 313.107†	9229.4	4.7704	µg/L	0.06226	4.7704	ppb	0.06226	1.31%
Ca 317.933Radial†	7234.1	5696.3	µg/L	27.48	5696.3	ppb	27.48	0.48%
Cd 226.502†	378.9	0.8294	µg/L	0.94367	0.8294	ppb	0.94367	113.78%
Co 228.616†	305.2	7.7586	µg/L	0.71067	7.7586	ppb	0.71067	9.16%
Cr 267.716†	5315.7	123.32	µg/L	2.617	123.32	ppb	2.617	2.12%
Cu 324.752†	702.5	18.064	µg/L	0.1213	18.064	ppb	0.1213	0.67%
Fe 238.204 Radial†	6405.0	91953	µg/L	648.0	91953	ppb	648.0	0.70%
K 766.490 Radial†	5361.0	3558.8	µg/L	2.79	3558.8	ppb	2.79	0.08%
Mg 279.077 IEC†	398.3	4242.7	µg/L	38.13	4242.7	ppb	38.13	0.90%
Mn 257.610†	702197.6	2606.1	µg/L	23.05	2606.1	ppb	23.05	0.88%
Mo 202.031†	40.2	8.5419	µg/L	0.59960	8.5419	ppb	0.59960	7.02%
Na 589.592 Radial†	3460.3	993.68	µg/L	7.231	993.68	ppb	7.231	0.73%

Ni 231.604†	1036.9	66.504	µg/L	3.5405	66.504	ppb	3.5405	5.32%
P 214.914†	308.3	669.09	µg/L	33.446	669.09	ppb	33.446	5.00%
Pb 220.353†	112.1	30.595	µg/L	1.7024	30.595	ppb	1.7024	5.56%
S 181.975 Axial†	6.8	39.176	µg/L	14.2740	39.176	ppb	14.2740	36.44%
Sb 206.836†	-2.6	-4.5696	µg/L	2.04033	-4.5696	ppb	2.04033	44.65%
Se 196.026†	-217.5	8.0409	µg/L	16.51343	8.0409	ppb	16.51343	205.37%
SiO2†	256894.4	54223	µg/L	337.7	54223	ppb	337.7	0.62%
Si 251.611†	298573.2	25043	µg/L	167.1	25043	ppb	167.1	0.67%
Sn 189.927†	-39.0	-12.190	µg/L	0.6050	-12.190	ppb	0.6050	4.96%
Sr 421.552†	5505.0	34.978	µg/L	0.2959	34.978	ppb	0.2959	0.85%
Ti 334.940†	1746816.4	4356.3	µg/L	45.62	4356.3	ppb	45.62	1.05%
Tl 190.801†	-24.4	1.5081	µg/L	5.27434	1.5081	ppb	5.27434	349.74%
U 409.014†	-1212.1	-128.80	µg/L	3.495	-128.80	ppb	3.495	2.71%
V 292.402†	3692.6	50.993	µg/L	0.6784	50.993	ppb	0.6784	1.33%
Zn 213.857†	14559.2	419.54	µg/L	5.566	419.54	ppb	5.566	1.33%

Sequence No.: 48
Sample ID: 244227008|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 340
Date Collected: 1/27/2010 12:21:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227008|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78197.2	78197.2	102	%			12:22:31
1	Al 396.153Radial†	74788.8	73499.2	51071	µg/L	51071	ppb	12:22:31
1	Ca 317.933Radial†	45791.4	44733.1	35224	µg/L	35224	ppb	12:22:31
1	Fe 238.204 Radial†	6718.0	6583.8	94520	µg/L	94520	ppb	12:22:51
1	K 766.490 Radial†	18932.8	18187.3	12073	µg/L	12073	ppb	12:22:31
1	Mg 279.077 IEC†	1231.5	1201.5	12993	µg/L	12993	ppb	12:22:51
1	Na 589.592 Radial†	3446.1	2840.4	815.67	µg/L	815.67	ppb	12:22:31
1	Sr 421.552†	34142.8	32983.7	209.58	µg/L	209.58	ppb	12:22:31
1	Sc 361.383	1962417.8	1962417.8	100.98	%			12:23:56
1	Y 371.029	1277428.1	1277428.1	103.96	%			12:23:56
1	Ag 328.068†	-958.0	-893.6	-1.5808	µg/L	-1.5808	ppb	12:24:02
1	As 188.979†	9.5	8.8	24.050	µg/L	24.050	ppb	12:24:22
1	B 249.677†	1707.6	1575.9	27.504	µg/L	27.504	ppb	12:24:02
1	Ba 233.527†	32167.1	31869.8	926.13	µg/L	926.13	ppb	12:24:02
1	Be 313.107†	15756.3	11764.2	7.0816	µg/L	7.0816	ppb	12:24:02
1	Cd 226.502†	336.5	468.7	3.1833	µg/L	3.1833	ppb	12:24:22
1	Co 228.616†	556.0	595.6	26.771	µg/L	26.771	ppb	12:24:22
1	Cr 267.716†	4241.0	4282.7	99.410	µg/L	99.410	ppb	12:24:02
1	Cu 324.752†	11632.0	7851.1	72.169	µg/L	72.169	ppb	12:24:02
1	Mn 257.610†	935662.7	926781.7	3435.8	µg/L	3435.8	ppb	12:23:56
1	Mo 202.031†	39.6	22.1	6.3635	µg/L	6.3635	ppb	12:24:22
1	Ni 231.604†	1405.9	1056.8	67.776	µg/L	67.776	ppb	12:24:22
1	P 214.914†	853.2	642.5	1469.0	µg/L	1469.0	ppb	12:24:22
1	Pb 220.353†	609.5	547.6	158.86	µg/L	158.86	ppb	12:24:22
1	S 181.975 Axial†	176.1	148.9	853.57	µg/L	853.57	ppb	12:24:22
1	Sb 206.836†	34.3	11.5	9.3612	µg/L	9.3612	ppb	12:24:22
1	Se 196.026†	-231.2	-241.4	-16.154	µg/L	-16.154	ppb	12:24:22
1	SiO2†	317684.6	312326.1	65924	µg/L	65924	ppb	12:23:56
1	Si 251.611†	366827.1	362966.5	30444	µg/L	30444	ppb	12:23:56
1	Sn 189.927†	-77.3	-99.9	-39.426	µg/L	-39.426	ppb	12:24:22
1	Ti 334.940†	1185285.2	1173021.2	2925.0	µg/L	2925.0	ppb	12:23:56
1	Tl 190.801†	-39.1	-15.6	2.8965	µg/L	2.8965	ppb	12:24:22
1	U 409.014†	-480.4	-242.8	-38.454	µg/L	-38.454	ppb	12:23:56
1	V 292.402†	9653.5	9682.0	125.63	µg/L	125.63	ppb	12:24:02
1	Zn 213.857†	15704.5	14880.9	428.21	µg/L	428.21	ppb	12:24:02
2	Sc RADIAL	78766.1	78766.1	103	%			12:22:57
2	Al 396.153Radial†	75234.9	73403.7	51004	µg/L	51004	ppb	12:22:57
2	Ca 317.933Radial†	46179.4	44786.6	35266	µg/L	35266	ppb	12:22:57
2	Fe 238.204 Radial†	6739.5	6557.1	94137	µg/L	94137	ppb	12:23:17
2	K 766.490 Radial†	18976.2	18095.2	12012	µg/L	12012	ppb	12:22:57
2	Mg 279.077 IEC†	1236.7	1197.9	12954	µg/L	12954	ppb	12:23:17
2	Na 589.592 Radial†	3422.9	2793.4	802.15	µg/L	802.15	ppb	12:22:57
2	Sr 421.552†	34251.6	32847.5	208.71	µg/L	208.71	ppb	12:22:57
2	Sc 361.383	1975018.8	1975018.8	101.63	%			12:24:30
2	Y 371.029	1286330.4	1286330.4	104.68	%			12:24:30
2	Ag 328.068†	-969.9	-899.2	-1.6604	µg/L	-1.6604	ppb	12:24:36
2	As 188.979†	14.8	14.0	35.846	µg/L	35.846	ppb	12:24:56
2	B 249.677†	1703.0	1560.5	26.957	µg/L	26.957	ppb	12:24:36
2	Ba 233.527†	32243.2	31741.5	922.40	µg/L	922.40	ppb	12:24:36
2	Be 313.107†	15818.0	11725.3	7.0522	µg/L	7.0522	ppb	12:24:36
2	Cd 226.502†	331.6	461.8	3.0215	µg/L	3.0215	ppb	12:24:56
2	Co 228.616†	554.8	590.9	26.498	µg/L	26.498	ppb	12:24:56
2	Cr 267.716†	4279.2	4293.4	99.660	µg/L	99.660	ppb	12:24:36
2	Cu 324.752†	11696.5	7841.0	72.040	µg/L	72.040	ppb	12:24:36
2	Mn 257.610†	944322.5	929391.0	3445.4	µg/L	3445.4	ppb	12:24:30
2	Mo 202.031†	39.2	21.4	6.2668	µg/L	6.2668	ppb	12:24:56
2	Ni 231.604†	1405.7	1047.8	67.203	µg/L	67.203	ppb	12:24:56
2	P 214.914†	841.5	625.5	1428.7	µg/L	1428.7	ppb	12:24:56
2	Pb 220.353†	595.0	529.6	153.60	µg/L	153.60	ppb	12:24:56

2	S 181.975 Axial†	174.4	146.1	837.32 µg/L	837.32 ppb	12:24:56
2	Sb 206.836†	29.0	6.1	3.3876 µg/L	3.3876 ppb	12:24:56
2	Se 196.026†	-220.2	-229.1	1.8469 µg/L	1.8469 ppb	12:24:56
2	SiO2†	320221.0	312814.7	66027 µg/L	66027 ppb	12:24:30
2	Si 251.611†	369952.8	363724.5	30508 µg/L	30508 ppb	12:24:30
2	Sn 189.927†	-77.8	-100.0	-39.475 µg/L	-39.475 ppb	12:24:56
2	Ti 334.940†	1195330.8	1175416.9	2931.0 µg/L	2931.0 ppb	12:24:30
2	Tl 190.801†	-38.0	-14.3	5.2282 µg/L	5.2282 ppb	12:24:56
2	U 409.014†	-506.5	-265.4	-40.562 µg/L	-40.562 ppb	12:24:30
2	V 292.402†	9678.0	9645.2	125.15 µg/L	125.15 ppb	12:24:36
2	Zn 213.857†	15733.0	14809.8	426.16 µg/L	426.16 ppb	12:24:36
3	Sc RADIAL	78372.8	78372.8	102 %		12:23:23
3	Al 396.153Radial†	74981.8	73523.8	51088 µg/L	51088 ppb	12:23:23
3	Ca 317.933Radial†	45831.5	44671.6	35175 µg/L	35175 ppb	12:23:23
3	Fe 238.204 Radial†	6700.8	6552.2	94066 µg/L	94066 ppb	12:23:43
3	K 766.490 Radial†	18990.1	18201.8	12083 µg/L	12083 ppb	12:23:23
3	Mg 279.077 IEC†	1233.7	1200.9	12987 µg/L	12987 ppb	12:23:43
3	Na 589.592 Radial†	3475.2	2861.4	821.68 µg/L	821.68 ppb	12:23:23
3	Sr 421.552†	34180.7	32945.6	209.33 µg/L	209.33 ppb	12:23:23
3	Sc 361.383	1970612.1	1970612.1	101.40 %		12:25:04
3	Y 371.029	1282637.7	1282637.7	104.38 %		12:25:04
3	Ag 328.068†	-970.8	-902.4	-1.7192 µg/L	-1.7192 ppb	12:25:09
3	As 188.979†	7.9	7.2	20.297 µg/L	20.297 ppb	12:25:30
3	B 249.677†	1655.6	1517.5	24.898 µg/L	24.898 ppb	12:25:09
3	Ba 233.527†	31539.1	31118.0	904.28 µg/L	904.28 ppb	12:25:09
3	Be 313.107†	15479.9	11426.7	6.8607 µg/L	6.8607 ppb	12:25:09
3	Cd 226.502†	298.8	430.1	2.0940 µg/L	2.0940 ppb	12:25:30
3	Co 228.616†	527.2	564.9	25.155 µg/L	25.155 ppb	12:25:30
3	Cr 267.716†	4122.8	4148.6	96.298 µg/L	96.298 ppb	12:25:09
3	Cu 324.752†	11532.6	7705.1	71.009 µg/L	71.009 ppb	12:25:09
3	Mn 257.610†	929766.4	917113.9	3400.0 µg/L	3400.0 ppb	12:25:04
3	Mo 202.031†	38.6	20.9	6.2019 µg/L	6.2019 ppb	12:25:30
3	Ni 231.604†	1347.3	993.3	63.768 µg/L	63.768 ppb	12:25:30
3	P 214.914†	804.8	591.2	1346.9 µg/L	1346.9 ppb	12:25:30
3	Pb 220.353†	575.8	511.9	148.47 µg/L	148.47 ppb	12:25:30
3	S 181.975 Axial†	164.6	136.8	784.14 µg/L	784.14 ppb	12:25:30
3	Sb 206.836†	27.3	4.5	1.6342 µg/L	1.6342 ppb	12:25:30
3	Se 196.026†	-212.4	-221.9	12.848 µg/L	12.848 ppb	12:25:30
3	SiO2†	316517.4	309866.9	65405 µg/L	65405 ppb	12:25:04
3	Si 251.611†	365517.2	360164.1	30209 µg/L	30209 ppb	12:25:04
3	Sn 189.927†	-69.2	-91.6	-34.639 µg/L	-34.639 ppb	12:25:30
3	Ti 334.940†	1175107.6	1158103.2	2887.8 µg/L	2887.8 ppb	12:25:04
3	Tl 190.801†	-27.6	-4.1	22.272 µg/L	22.272 ppb	12:25:30
3	U 409.014†	-595.3	-354.1	-49.010 µg/L	-49.010 ppb	12:25:04
3	V 292.402†	9342.9	9336.0	121.28 µg/L	121.28 ppb	12:25:09
3	Zn 213.857†	15428.0	14543.6	418.42 µg/L	418.42 ppb	12:25:09

Mean Data: 244227008|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1969349.5	101.34	%	0.329				0.32%
Sc RADIAL	78445.4	102	%	0.4				0.37%
Y 371.029	1282132.0	104.34	%	0.364				0.35%
Ag 328.068†	-898.4	-1.6535	µg/L	0.06948	-1.6535	ppb	0.06948	4.20%
Al 396.153Radial†	73475.6	51054	µg/L	44.1	51054	ppb	44.1	0.09%
As 188.979†	10.0	26.731	µg/L	8.1141	26.731	ppb	8.1141	30.35%
B 249.677†	1551.3	26.453	µg/L	1.3743	26.453	ppb	1.3743	5.20%
Ba 233.527†	31576.4	917.61	µg/L	11.688	917.61	ppb	11.688	1.27%
Be 313.107†	11638.7	6.9982	µg/L	0.11999	6.9982	ppb	0.11999	1.71%
Ca 317.933Radial†	44730.4	35222	µg/L	45.3	35222	ppb	45.3	0.13%
Cd 226.502†	453.5	2.7662	µg/L	0.58778	2.7662	ppb	0.58778	21.25%
Co 228.616†	583.8	26.142	µg/L	0.8652	26.142	ppb	0.8652	3.31%
Cr 267.716†	4241.6	98.456	µg/L	1.8730	98.456	ppb	1.8730	1.90%
Cu 324.752†	7799.0	71.739	µg/L	0.6360	71.739	ppb	0.6360	0.89%
Fe 238.204 Radial†	6564.4	94241	µg/L	244.3	94241	ppb	244.3	0.26%
K 766.490 Radial†	18161.4	12056	µg/L	38.4	12056	ppb	38.4	0.32%
Mg 279.077 IEC†	1200.1	12978	µg/L	20.9	12978	ppb	20.9	0.16%
Mn 257.610†	924428.9	3427.1	µg/L	23.91	3427.1	ppb	23.91	0.70%
Mo 202.031†	21.5	6.2774	µg/L	0.08135	6.2774	ppb	0.08135	1.30%
Na 589.592 Radial†	2831.7	813.17	µg/L	10.003	813.17	ppb	10.003	1.23%

Ni 231.604†	1032.6	66.249	µg/L	2.1679	66.249	ppb	2.1679	3.27%
P 214.914†	619.7	1414.9	µg/L	62.22	1414.9	ppb	62.22	4.40%
Pb 220.353†	529.7	153.64	µg/L	5.196	153.64	ppb	5.196	3.38%
S 181.975 Axial†	143.9	825.01	µg/L	36.314	825.01	ppb	36.314	4.40%
Sb 206.836†	7.4	4.7943	µg/L	4.05100	4.7943	ppb	4.05100	84.50%
Se 196.026†	-230.8	-0.4864	µg/L	14.64120	-0.4864	ppb	14.64120	>999.9%
SiO2†	311669.2	65785	µg/L	333.5	65785	ppb	333.5	0.51%
Si 251.611†	362285.0	30387	µg/L	157.3	30387	ppb	157.3	0.52%
Sn 189.927†	-97.2	-37.847	µg/L	2.7778	-37.847	ppb	2.7778	7.34%
Sr 421.552†	32925.6	209.21	µg/L	0.446	209.21	ppb	0.446	0.21%
Ti 334.940†	1168847.1	2914.6	µg/L	23.40	2914.6	ppb	23.40	0.80%
Tl 190.801†	-11.3	10.132	µg/L	10.5777	10.132	ppb	10.5777	104.40%
U 409.014†	-287.4	-42.676	µg/L	5.5864	-42.676	ppb	5.5864	13.09%
V 292.402†	9554.4	124.02	µg/L	2.383	124.02	ppb	2.383	1.92%
Zn 213.857†	14744.8	424.26	µg/L	5.164	424.26	ppb	5.164	1.22%

Sequence No.: 49
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 12:25:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78446.0	78446.0	102	%			12:26:16
1	Al 396.153Radial†	7580.4	7451.2	5166.7	µg/L	5166.7	ppb	12:26:16
1	Ca 317.933Radial†	6966.4	6570.3	5173.6	µg/L	5173.6	ppb	12:26:16
1	Fe 238.204 Radial†	394.4	370.4	5328.6	µg/L	5328.6	ppb	12:26:37
1	K 766.490 Radial†	8258.0	7674.8	5094.8	µg/L	5094.8	ppb	12:26:16
1	Mg 279.077 IEC†	505.1	486.3	5303.5	µg/L	5303.5	ppb	12:26:37
1	Na 589.592 Radial†	36506.3	35204.6	10109	µg/L	10109	ppb	12:26:16
1	Sr 421.552†	82220.9	79958.7	508.05	µg/L	508.05	ppb	12:26:16
1	Sc 361.383	1958216.0	1958216.0	100.76	%			12:27:40
1	Y 371.029	1233204.0	1233204.0	100.36	%			12:27:40
1	Ag 328.068†	56055.9	55686.7	522.88	µg/L	522.88	ppb	12:27:45
1	As 188.979†	236.8	234.5	540.13	µg/L	540.13	ppb	12:28:06
1	B 249.677†	10702.4	10506.2	509.19	µg/L	509.19	ppb	12:27:45
1	Ba 233.527†	18108.4	17985.9	523.49	µg/L	523.49	ppb	12:27:45
1	Be 313.107†	751785.0	742255.1	516.94	µg/L	516.94	ppb	12:27:40
1	Cd 226.502†	17637.5	17639.4	519.18	µg/L	519.18	ppb	12:27:45
1	Co 228.616†	9538.1	9510.9	524.33	µg/L	524.33	ppb	12:27:45
1	Cr 267.716†	22753.8	22664.4	526.02	µg/L	526.02	ppb	12:27:45
1	Cu 324.752†	73665.1	69439.4	522.84	µg/L	522.84	ppb	12:27:45
1	Mn 257.610†	140467.9	139594.2	516.19	µg/L	516.19	ppb	12:27:45
1	Mo 202.031†	4230.3	4181.1	525.35	µg/L	525.35	ppb	12:28:06
1	Ni 231.604†	8756.7	8355.0	525.85	µg/L	525.85	ppb	12:27:45
1	P 214.914†	1329.7	1117.2	2624.7	µg/L	2624.7	ppb	12:28:06
1	Pb 220.353†	1906.1	1835.7	535.50	µg/L	535.50	ppb	12:28:06
1	S 181.975 Axial†	209.6	182.5	1046.0	µg/L	1046.0	ppb	12:28:06
1	Sb 206.836†	505.3	479.1	532.55	µg/L	532.55	ppb	12:28:06
1	Se 196.026†	350.0	334.9	548.61	µg/L	548.61	ppb	12:28:06
1	SiO2†	29200.3	26700.5	5635.7	µg/L	5635.7	ppb	12:27:45
1	Si 251.611†	32060.3	31513.1	2643.2	µg/L	2643.2	ppb	12:27:45
1	Sn 189.927†	959.7	929.0	544.92	µg/L	544.92	ppb	12:28:06
1	Ti 334.940†	210590.7	208223.0	518.97	µg/L	518.97	ppb	12:27:40
1	Tl 190.801†	287.4	308.3	535.63	µg/L	535.63	ppb	12:28:06
1	U 409.014†	5354.7	5547.2	528.30	µg/L	528.30	ppb	12:27:45
1	V 292.402†	42339.9	42141.6	530.12	µg/L	530.12	ppb	12:27:45
1	Zn 213.857†	18733.7	17920.6	518.73	µg/L	518.73	ppb	12:27:45
2	Sc RADIAL	78500.6	78500.6	102	%			12:26:42
2	Al 396.153Radial†	7588.2	7453.6	5168.3	µg/L	5168.3	ppb	12:26:42
2	Ca 317.933Radial†	6991.5	6590.1	5189.2	µg/L	5189.2	ppb	12:26:42
2	Fe 238.204 Radial†	389.2	365.0	5251.7	µg/L	5251.7	ppb	12:27:03
2	K 766.490 Radial†	8318.3	7728.2	5130.3	µg/L	5130.3	ppb	12:26:42
2	Mg 279.077 IEC†	501.3	482.2	5258.6	µg/L	5258.6	ppb	12:27:03
2	Na 589.592 Radial†	36567.5	35239.6	10120	µg/L	10120	ppb	12:26:42
2	Sr 421.552†	82386.5	80064.7	508.72	µg/L	508.72	ppb	12:26:42
2	Sc 361.383	1955808.7	1955808.7	100.64	%			12:28:13
2	Y 371.029	1231481.4	1231481.4	100.22	%			12:28:13
2	Ag 328.068†	56404.0	56101.1	526.76	µg/L	526.76	ppb	12:28:18
2	As 188.979†	235.4	233.3	537.43	µg/L	537.43	ppb	12:28:39
2	B 249.677†	10765.2	10581.6	512.91	µg/L	512.91	ppb	12:28:18
2	Ba 233.527†	18213.3	18112.2	527.17	µg/L	527.17	ppb	12:28:18
2	Be 313.107†	750730.3	742125.5	516.85	µg/L	516.85	ppb	12:28:13
2	Cd 226.502†	17804.1	17826.5	524.69	µg/L	524.69	ppb	12:28:18
2	Co 228.616†	9580.5	9564.7	527.29	µg/L	527.29	ppb	12:28:18
2	Cr 267.716†	22918.3	22855.6	530.46	µg/L	530.46	ppb	12:28:18
2	Cu 324.752†	74099.4	69960.8	526.75	µg/L	526.75	ppb	12:28:18
2	Mn 257.610†	141459.4	140751.0	520.45	µg/L	520.45	ppb	12:28:18
2	Mo 202.031†	4231.6	4187.6	526.16	µg/L	526.16	ppb	12:28:39
2	Ni 231.604†	8794.9	8403.7	528.92	µg/L	528.92	ppb	12:28:18
2	P 214.914†	1339.6	1128.6	2651.7	µg/L	2651.7	ppb	12:28:39
2	Pb 220.353†	1915.3	1847.2	538.86	µg/L	538.86	ppb	12:28:39

2	S 181.975 Axial†	209.0	182.2	1044.4 µg/L	1044.4 ppb	12:28:39
2	Sb 206.836†	517.0	491.3	546.11 µg/L	546.11 ppb	12:28:39
2	Se 196.026†	344.5	329.9	540.42 µg/L	540.42 ppb	12:28:39
2	SiO2†	29455.7	26990.0	5696.9 µg/L	5696.9 ppb	12:28:18
2	Si 251.611†	32215.3	31706.3	2659.4 µg/L	2659.4 ppb	12:28:18
2	Sn 189.927†	953.4	923.9	541.92 µg/L	541.92 ppb	12:28:39
2	Ti 334.940†	210150.1	208042.5	518.52 µg/L	518.52 ppb	12:28:13
2	Tl 190.801†	285.9	307.2	533.63 µg/L	533.63 ppb	12:28:39
2	U 409.014†	5362.4	5561.4	529.67 µg/L	529.67 ppb	12:28:18
2	V 292.402†	42628.1	42479.7	534.33 µg/L	534.33 ppb	12:28:18
2	Zn 213.857†	18876.8	18085.7	523.53 µg/L	523.53 ppb	12:28:18
3	Sc RADIAL	76621.4	76621.4	99.7 %		12:27:08
3	Al 396.153Radial†	7446.8	7494.0	5197.6 µg/L	5197.6 ppb	12:27:08
3	Ca 317.933Radial†	6779.2	6545.1	5153.7 µg/L	5153.7 ppb	12:27:08
3	Fe 238.204 Radial†	389.0	374.1	5381.1 µg/L	5381.1 ppb	12:27:29
3	K 766.490 Radial†	8109.0	7718.0	5123.5 µg/L	5123.5 ppb	12:27:08
3	Mg 279.077 IEC†	505.2	498.2	5432.2 µg/L	5432.2 ppb	12:27:29
3	Na 589.592 Radial†	35876.1	35424.0	10172 µg/L	10172 ppb	12:27:08
3	Sr 421.552†	80614.5	80265.4	510.00 µg/L	510.00 ppb	12:27:08
3	Sc 361.383	1955585.7	1955585.7	100.63 %		12:28:46
3	Y 371.029	1231102.9	1231102.9	100.19 %		12:28:46
3	Ag 328.068†	54711.1	54425.1	510.96 µg/L	510.96 ppb	12:28:51
3	As 188.979†	208.0	206.2	474.85 µg/L	474.85 ppb	12:29:12
3	B 249.677†	10430.8	10250.6	496.68 µg/L	496.68 ppb	12:28:51
3	Ba 233.527†	17382.3	17288.4	503.18 µg/L	503.18 ppb	12:28:51
3	Be 313.107†	735123.0	726700.5	506.11 µg/L	506.11 ppb	12:28:46
3	Cd 226.502†	17000.3	17029.8	501.20 µg/L	501.20 ppb	12:28:51
3	Co 228.616†	9089.5	9077.9	500.40 µg/L	500.40 ppb	12:28:51
3	Cr 267.716†	21447.8	21396.9	496.60 µg/L	496.60 ppb	12:28:51
3	Cu 324.752†	70514.6	66406.8	500.05 µg/L	500.05 ppb	12:28:51
3	Mn 257.610†	134075.7	133429.3	493.42 µg/L	493.42 ppb	12:28:51
3	Mo 202.031†	3762.2	3721.5	467.63 µg/L	467.63 ppb	12:29:12
3	Ni 231.604†	8333.6	7946.2	500.13 µg/L	500.13 ppb	12:28:51
3	P 214.914†	1236.1	1025.9	2407.7 µg/L	2407.7 ppb	12:29:12
3	Pb 220.353†	1751.6	1684.8	491.39 µg/L	491.39 ppb	12:29:12
3	S 181.975 Axial†	193.0	166.3	953.40 µg/L	953.40 ppb	12:29:12
3	Sb 206.836†	468.0	442.7	491.72 µg/L	491.72 ppb	12:29:12
3	Se 196.026†	319.0	304.6	500.80 µg/L	500.80 ppb	12:29:12
3	SiO2†	28290.1	25834.9	5453.1 µg/L	5453.1 ppb	12:28:51
3	Si 251.611†	30984.0	30486.4	2557.1 µg/L	2557.1 ppb	12:28:51
3	Sn 189.927†	843.1	814.4	478.02 µg/L	478.02 ppb	12:29:12
3	Ti 334.940†	205262.9	203209.6	506.45 µg/L	506.45 ppb	12:28:46
3	Tl 190.801†	271.6	293.0	509.09 µg/L	509.09 ppb	12:29:12
3	U 409.014†	5016.8	5218.5	496.93 µg/L	496.93 ppb	12:28:51
3	V 292.402†	40326.0	40196.7	505.39 µg/L	505.39 ppb	12:28:51
3	Zn 213.857†	17917.6	17134.6	495.95 µg/L	495.95 ppb	12:28:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1956536.8	100.68	%	0.075				0.07%
Sc RADIAL	77856.0	101	%	1.4				1.37%
Y 371.029	1231929.4	100.25	%	0.091				0.09%
Ag 328.068†	55404.3	520.20	µg/L	8.234	520.20	ppb	8.234	1.58%
QC value within limits for Ag 328.068 Recovery = 104.04%								
Al 396.153Radial†	7466.3	5177.5	µg/L	17.39	5177.5	ppb	17.39	0.34%
QC value within limits for Al 396.153Radial Recovery = 103.55%								
As 188.979†	224.7	517.47	µg/L	36.934	517.47	ppb	36.934	7.14%
QC value within limits for As 188.979 Recovery = 103.49%								
B 249.677†	10446.1	506.26	µg/L	8.502	506.26	ppb	8.502	1.68%
QC value within limits for B 249.677 Recovery = 101.25%								
Ba 233.527†	17795.5	517.95	µg/L	12.917	517.95	ppb	12.917	2.49%
QC value within limits for Ba 233.527 Recovery = 103.59%								
Be 313.107†	737027.0	513.30	µg/L	6.228	513.30	ppb	6.228	1.21%
QC value within limits for Be 313.107 Recovery = 102.66%								
Ca 317.933Radial†	6568.5	5172.2	µg/L	17.78	5172.2	ppb	17.78	0.34%
QC value within limits for Ca 317.933Radial Recovery = 103.44%								
Cd 226.502†	17498.6	515.02	µg/L	12.286	515.02	ppb	12.286	2.39%
QC value within limits for Cd 226.502 Recovery = 103.00%								
Co 228.616†	9384.5	517.34	µg/L	14.747	517.34	ppb	14.747	2.85%

QC value within limits for Co 228.616 Recovery = 103.47%

Cr 267.716†	22305.6	517.69 µg/L	18.398	517.69 ppb	18.398	3.55%

QC value within limits for Cr 267.716 Recovery = 103.54%

Cu 324.752†	68602.3	516.55 µg/L	14.422	516.55 ppb	14.422	2.79%

QC value within limits for Cu 324.752 Recovery = 103.31%

Fe 238.204 Radial†	369.8	5320.5 µg/L	65.10	5320.5 ppb	65.10	1.22%

QC value within limits for Fe 238.204 Radial Recovery = 106.41%

K 766.490 Radial†	7707.0	5116.2 µg/L	18.84	5116.2 ppb	18.84	0.37%

QC value within limits for K 766.490 Radial Recovery = 102.32%

Mg 279.077 IEC†	488.9	5331.4 µg/L	90.09	5331.4 ppb	90.09	1.69%

QC value within limits for Mg 279.077 IEC Recovery = 106.63%

Mn 257.610†	137924.8	510.02 µg/L	14.536	510.02 ppb	14.536	2.85%

QC value within limits for Mn 257.610 Recovery = 102.00%

Mo 202.031†	4030.1	506.38 µg/L	33.562	506.38 ppb	33.562	6.63%

QC value within limits for Mo 202.031 Recovery = 101.28%

Na 589.592 Radial†	35289.4	10134 µg/L	33.9	10134 ppb	33.9	0.33%

QC value within limits for Na 589.592 Radial Recovery = 101.34%

Ni 231.604†	8235.0	518.30 µg/L	15.811	518.30 ppb	15.811	3.05%

QC value within limits for Ni 231.604 Recovery = 103.66%

P 214.914†	1090.6	2561.4 µg/L	133.77	2561.4 ppb	133.77	5.22%

QC value within limits for P 214.914 Recovery = 102.45%

Pb 220.353†	1789.2	521.92 µg/L	26.492	521.92 ppb	26.492	5.08%

QC value within limits for Pb 220.353 Recovery = 104.38%

S 181.975 Axial†	177.0	1014.6 µg/L	53.01	1014.6 ppb	53.01	5.22%

QC value within limits for S 181.975 Axial Recovery = 101.46%

Sb 206.836†	471.0	523.46 µg/L	28.313	523.46 ppb	28.313	5.41%

QC value within limits for Sb 206.836 Recovery = 104.69%

Se 196.026†	323.1	529.94 µg/L	25.570	529.94 ppb	25.570	4.82%

QC value within limits for Se 196.026 Recovery = 105.99%

SiO2†	26508.5	5595.2 µg/L	126.85	5595.2 ppb	126.85	2.27%

QC value within limits for SiO2 Recovery = 104.63%

Si 251.611†	31235.3	2619.9 µg/L	55.00	2619.9 ppb	55.00	2.10%

QC value within limits for Si 251.611 Recovery = 104.80%

Sn 189.927†	889.1	521.62 µg/L	37.785	521.62 ppb	37.785	7.24%

QC value within limits for Sn 189.927 Recovery = 104.32%

Sr 421.552†	80096.3	508.92 µg/L	0.990	508.92 ppb	0.990	0.19%

QC value within limits for Sr 421.552 Recovery = 101.78%

Ti 334.940†	206491.7	514.65 µg/L	7.100	514.65 ppb	7.100	1.38%

QC value within limits for Ti 334.940 Recovery = 102.93%

Tl 190.801†	302.8	526.12 µg/L	14.777	526.12 ppb	14.777	2.81%

QC value within limits for Tl 190.801 Recovery = 105.22%

U 409.014†	5442.3	518.30 µg/L	18.519	518.30 ppb	18.519	3.57%

QC value within limits for U 409.014 Recovery = 103.66%

V 292.402†	41606.0	523.28 µg/L	15.636	523.28 ppb	15.636	2.99%

QC value within limits for V 292.402 Recovery = 104.66%

Zn 213.857†	17713.6	512.73 µg/L	14.731	512.73 ppb	14.731	2.87%

QC value within limits for Zn 213.857 Recovery = 102.55%

All analyte(s) passed QC.

Sequence No.: 50
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 12:29:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76131.1	76131.1	99.1	%			12:29:54
1	Al 396.153Radial†	-14.4	13.5	9.3521	µg/L	9.3521	ppb	12:29:54
1	Ca 317.933Radial†	255.9	6.6	5.1869	µg/L	5.1869	ppb	12:30:14
1	Fe 238.204 Radial†	15.9	0.2	2.8812	µg/L	2.8812	ppb	12:30:14
1	K 766.490 Radial†	409.9	1.6	1.0810	µg/L	1.0810	ppb	12:29:54
1	Mg 279.077 IEC†	10.7	2.5	27.212	µg/L	27.212	ppb	12:30:14
1	Na 589.592 Radial†	387.3	-154.1	-44.266	µg/L	-44.266	ppb	12:29:54
1	Sr 421.552†	579.8	27.4	0.1741	µg/L	0.1741	ppb	12:29:54
1	Sc 361.383	1949149.1	1949149.1	100.30	%			12:31:16
1	Y 371.029	1231337.7	1231337.7	100.21	%			12:31:16
1	Ag 328.068†	-34.5	20.7	0.1920	µg/L	0.1920	ppb	12:31:21
1	As 188.979†	-0.9	-1.4	-3.2912	µg/L	-3.2912	ppb	12:31:42
1	B 249.677†	118.9	3.4	0.1636	µg/L	0.1636	ppb	12:31:42
1	Ba 233.527†	-13.3	1.3	0.0372	µg/L	0.0372	ppb	12:31:42
1	Be 313.107†	3909.9	58.9	0.0409	µg/L	0.0409	ppb	12:31:21
1	Cd 226.502†	-124.7	11.1	0.3265	µg/L	0.3265	ppb	12:31:42
1	Co 228.616†	-46.7	-1.6	-0.0892	µg/L	-0.0892	ppb	12:31:42
1	Cr 267.716†	-74.9	8.1	0.1880	µg/L	0.1880	ppb	12:31:42
1	Cu 324.752†	3702.9	23.7	0.1787	µg/L	0.1787	ppb	12:31:21
1	Mn 257.610†	-145.8	44.1	0.1621	µg/L	0.1621	ppb	12:31:42
1	Mo 202.031†	16.2	-1.0	-0.1279	µg/L	-0.1279	ppb	12:31:42
1	Ni 231.604†	339.8	3.4	0.2121	µg/L	0.2121	ppb	12:31:42
1	P 214.914†	220.8	17.6	42.194	µg/L	42.194	ppb	12:31:42
1	Pb 220.353†	63.9	7.7	2.2556	µg/L	2.2556	ppb	12:31:42
1	S 181.975 Axial†	24.2	-1.4	-8.2102	µg/L	-8.2102	ppb	12:31:42
1	Sb 206.836†	22.6	0.1	0.1080	µg/L	0.1080	ppb	12:31:42
1	Se 196.026†	3.8	-8.7	-13.719	µg/L	-13.719	ppb	12:31:42
1	SiO2†	2282.3	-3.2	-0.6838	µg/L	-0.6838	ppb	12:31:21
1	Si 251.611†	334.7	29.2	2.4503	µg/L	2.4503	ppb	12:31:42
1	Sn 189.927†	26.2	2.7	1.5581	µg/L	1.5581	ppb	12:31:42
1	Ti 334.940†	902.9	126.6	0.3136	µg/L	0.3136	ppb	12:31:21
1	Tl 190.801†	-28.1	-4.9	-8.4405	µg/L	-8.4405	ppb	12:31:42
1	U 409.014†	-227.3	6.3	0.6031	µg/L	0.6031	ppb	12:31:21
1	V 292.402†	-132.3	-9.8	-0.1218	µg/L	-0.1218	ppb	12:31:21
1	Zn 213.857†	668.1	-5.2	-0.1549	µg/L	-0.1549	ppb	12:31:42
2	Sc RADIAL	76720.2	76720.2	99.9	%			12:30:20
2	Al 396.153Radial†	-19.0	8.9	6.2249	µg/L	6.2249	ppb	12:30:20
2	Ca 317.933Radial†	250.4	-0.9	-0.7386	µg/L	-0.7386	ppb	12:30:40
2	Fe 238.204 Radial†	18.4	2.5	35.985	µg/L	35.985	ppb	12:30:40
2	K 766.490 Radial†	448.0	36.6	24.290	µg/L	24.290	ppb	12:30:20
2	Mg 279.077 IEC†	11.2	2.9	31.655	µg/L	31.655	ppb	12:30:40
2	Na 589.592 Radial†	306.8	-237.7	-68.266	µg/L	-68.266	ppb	12:30:20
2	Sr 421.552†	567.9	10.9	0.0693	µg/L	0.0693	ppb	12:30:20
2	Sc 361.383	1938234.5	1938234.5	99.735	%			12:31:48
2	Y 371.029	1225115.0	1225115.0	99.700	%			12:31:48
2	Ag 328.068†	-20.1	35.0	0.3299	µg/L	0.3299	ppb	12:31:53
2	As 188.979†	2.4	1.8	4.1780	µg/L	4.1780	ppb	12:32:14
2	B 249.677†	109.9	-5.0	-0.2639	µg/L	-0.2639	ppb	12:32:14
2	Ba 233.527†	-9.3	5.2	0.1510	µg/L	0.1510	ppb	12:32:14
2	Be 313.107†	3917.2	88.2	0.0613	µg/L	0.0613	ppb	12:31:53
2	Cd 226.502†	-121.2	13.9	0.4054	µg/L	0.4054	ppb	12:32:14
2	Co 228.616†	-45.0	-0.1	-0.0069	µg/L	-0.0069	ppb	12:32:14
2	Cr 267.716†	-82.3	0.3	0.0062	µg/L	0.0062	ppb	12:32:14
2	Cu 324.752†	3671.9	13.4	0.1060	µg/L	0.1060	ppb	12:31:53
2	Mn 257.610†	-137.9	51.2	0.1928	µg/L	0.1928	ppb	12:32:14
2	Mo 202.031†	12.3	-4.8	-0.6059	µg/L	-0.6059	ppb	12:32:14
2	Ni 231.604†	337.3	2.7	0.1725	µg/L	0.1725	ppb	12:32:14
2	P 214.914†	217.0	15.1	36.133	µg/L	36.133	ppb	12:32:14
2	Pb 220.353†	58.2	2.5	0.7171	µg/L	0.7171	ppb	12:32:14

2	S 181.975 Axial†	20.9	-4.5	-26.029 µg/L	-26.029 ppb	12:32:14
2	Sb 206.836†	28.9	6.6	7.3227 µg/L	7.3227 ppb	12:32:14
2	Se 196.026†	9.1	-3.3	-5.1662 µg/L	-5.1662 ppb	12:32:14
2	SiO2†	2293.1	20.4	4.3133 µg/L	4.3133 ppb	12:31:53
2	Si 251.611†	345.3	41.7	3.4989 µg/L	3.4989 ppb	12:32:14
2	Sn 189.927†	19.7	-3.7	-2.1445 µg/L	-2.1445 ppb	12:32:14
2	Ti 334.940†	894.7	123.4	0.3052 µg/L	0.3052 ppb	12:31:53
2	Tl 190.801†	-27.7	-4.7	-8.0929 µg/L	-8.0929 ppb	12:32:14
2	U 409.014†	-286.1	-53.9	-5.1452 µg/L	-5.1452 ppb	12:31:53
2	V 292.402†	-101.0	20.8	0.2509 µg/L	0.2509 ppb	12:31:53
2	Zn 213.857†	663.6	-6.0	-0.1784 µg/L	-0.1784 ppb	12:32:14
3	Sc RADIAL	76482.7	76482.7	99.6 %		12:30:45
3	Al 396.153Radial†	-23.6	4.3	2.9869 µg/L	2.9869 ppb	12:30:45
3	Ca 317.933Radial†	251.7	1.1	0.8683 µg/L	0.8683 ppb	12:31:06
3	Fe 238.204 Radial†	18.7	2.9	41.557 µg/L	41.557 ppb	12:31:06
3	K 766.490 Radial†	470.5	60.6	40.202 µg/L	40.202 ppb	12:30:45
3	Mg 279.077 IEC†	11.3	3.0	32.804 µg/L	32.804 ppb	12:31:06
3	Na 589.592 Radial†	351.8	-191.5	-55.005 µg/L	-55.005 ppb	12:30:45
3	Sr 421.552†	574.8	19.7	0.1249 µg/L	0.1249 ppb	12:30:45
3	Sc 361.383	1941610.2	1941610.2	99.908 %		12:32:20
3	Y 371.029	1226605.1	1226605.1	99.821 %		12:32:20
3	Ag 328.068†	-107.6	-52.6	-0.4862 µg/L	-0.4862 ppb	12:32:25
3	As 188.979†	-3.3	-3.9	-8.8947 µg/L	-8.8947 ppb	12:32:46
3	B 249.677†	115.3	0.2	-0.0098 µg/L	-0.0098 ppb	12:32:46
3	Ba 233.527†	-25.7	-11.2	-0.3246 µg/L	-0.3246 ppb	12:32:46
3	Be 313.107†	3946.2	110.4	0.0768 µg/L	0.0768 ppb	12:32:25
3	Cd 226.502†	-130.2	5.1	0.1460 µg/L	0.1460 ppb	12:32:46
3	Co 228.616†	-42.1	2.9	0.1588 µg/L	0.1588 ppb	12:32:46
3	Cr 267.716†	-79.6	3.1	0.0732 µg/L	0.0732 ppb	12:32:46
3	Cu 324.752†	3650.1	-14.8	-0.1051 µg/L	-0.1051 ppb	12:32:25
3	Mn 257.610†	-140.7	48.6	0.1838 µg/L	0.1838 ppb	12:32:46
3	Mo 202.031†	16.6	-0.6	-0.0753 µg/L	-0.0753 ppb	12:32:46
3	Ni 231.604†	331.9	-3.3	-0.2053 µg/L	-0.2053 ppb	12:32:46
3	P 214.914†	217.1	14.8	35.386 µg/L	35.386 ppb	12:32:46
3	Pb 220.353†	49.5	-6.4	-1.8593 µg/L	-1.8593 ppb	12:32:46
3	S 181.975 Axial†	18.9	-6.6	-37.572 µg/L	-37.572 ppb	12:32:46
3	Sb 206.836†	23.9	1.5	1.7024 µg/L	1.7024 ppb	12:32:46
3	Se 196.026†	7.6	-4.9	-7.5433 µg/L	-7.5433 ppb	12:32:46
3	SiO2†	2297.7	21.0	4.4392 µg/L	4.4392 ppb	12:32:25
3	Si 251.611†	343.1	38.9	3.2599 µg/L	3.2599 ppb	12:32:46
3	Sn 189.927†	26.3	2.9	1.7173 µg/L	1.7173 ppb	12:32:46
3	Ti 334.940†	890.2	117.3	0.2901 µg/L	0.2901 ppb	12:32:25
3	Tl 190.801†	-20.1	2.9	5.0146 µg/L	5.0146 ppb	12:32:46
3	U 409.014†	-282.5	-49.8	-4.7537 µg/L	-4.7537 ppb	12:32:25
3	V 292.402†	-98.9	23.1	0.2845 µg/L	0.2845 ppb	12:32:25
3	Zn 213.857†	675.0	4.3	0.1231 µg/L	0.1231 ppb	12:32:46

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1942997.9	99.980	%	0.2875				0.29%
Sc RADIAL	76444.7	99.5	%	0.39				0.39%
Y 371.029	1227685.9	99.909	%	0.2644				0.26%
Ag 328.068†	1.0	0.0119	µg/L	0.43685	0.0119	ppb	0.43685	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	8.9	6.1879	µg/L	3.18276	6.1879	ppb	3.18276	51.43%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.2	-2.6693	µg/L	6.55853	-2.6693	ppb	6.55853	245.70%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-0.5	-0.0367	µg/L	0.21505	-0.0367	ppb	0.21505	585.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.6	-0.0455	µg/L	0.24831	-0.0455	ppb	0.24831	546.13%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	85.8	0.0597	µg/L	0.01800	0.0597	ppb	0.01800	30.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.3	1.7722	µg/L	3.06441	1.7722	ppb	3.06441	172.92%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.0	0.2926	µg/L	0.13301	0.2926	ppb	0.13301	45.45%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	0.4	0.0209	µg/L	0.12628	0.0209	ppb	0.12628	604.30%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.8      0.0891 µg/L       0.09195      0.0891 ppb        0.09195 103.19%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                 7.5      0.0598 µg/L       0.14744      0.0598 ppb        0.14744 246.40%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.9      26.808 µg/L       20.9076      26.808 ppb        20.9076  77.99%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          32.9      21.858 µg/L       19.6737      21.858 ppb        19.6737  90.01%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             2.8      30.557 µg/L        2.9531      30.557 ppb         2.9531   9.66%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                48.0      0.1796 µg/L       0.01576      0.1796 ppb        0.01576   8.78%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -2.2     -0.2697 µg/L       0.29237     -0.2697 ppb        0.29237 108.40%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -194.5     -55.846 µg/L       12.0220     -55.846 ppb        12.0220  21.53%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 0.9      0.0598 µg/L       0.23039      0.0598 ppb        0.23039 385.54%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 15.8      37.904 µg/L        3.7335      37.904 ppb         3.7335   9.85%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.3      0.3711 µg/L       2.07916      0.3711 ppb        2.07916 560.24%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.2     -23.937 µg/L       14.7924     -23.937 ppb        14.7924  61.80%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 2.8      3.0444 µg/L       3.78995      3.0444 ppb        3.78995 124.49%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.6     -8.8096 µg/L       4.41495     -8.8096 ppb        4.41495  50.12%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      12.7      2.6896 µg/L       2.92211      2.6896 ppb        2.92211 108.65%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                36.6      3.0697 µg/L       0.54954      3.0697 ppb        0.54954  17.90%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.6      0.3770 µg/L       2.18511      0.3770 ppb        2.18511 579.67%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                19.3      0.1228 µg/L       0.05242      0.1228 ppb        0.05242  42.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               122.4      0.3030 µg/L       0.01193      0.3030 ppb        0.01193   3.94%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.2     -3.8396 µg/L       7.66992     -3.8396 ppb        7.66992 199.76%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -32.4     -3.0986 µg/L       3.21172     -3.0986 ppb        3.21172 103.65%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 11.4      0.1378 µg/L       0.22552      0.1378 ppb        0.22552 163.61%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -2.3     -0.0701 µg/L       0.16773     -0.0701 ppb        0.16773 239.44%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 51
Sample ID: 244227009|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 341
Date Collected: 1/27/2010 12:32:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227009|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78730.1	78730.1	102	%			12:33:33
1	Al 396.153Radial†	85758.5	83705.5	58163	µg/L	58163	ppb	12:33:33
1	Ca 317.933Radial†	19395.9	18673.5	14704	µg/L	14704	ppb	12:33:33
1	Fe 238.204 Radial†	8085.1	7873.0	113030	µg/L	113030	ppb	12:33:53
1	K 766.490 Radial†	16006.1	15205.7	10094	µg/L	10094	ppb	12:33:33
1	Mg 279.077 IEC†	1051.3	1017.5	10968	µg/L	10968	ppb	12:33:53
1	Na 589.592 Radial†	2659.9	2050.4	588.80	µg/L	588.80	ppb	12:33:33
1	Sr 421.552†	21416.8	20339.4	129.23	µg/L	129.23	ppb	12:33:33
1	Sc 361.383	1959089.4	1959089.4	100.81	%			12:34:59
1	Y 371.029	1252886.0	1252886.0	101.96	%			12:34:59
1	Ag 328.068†	-1132.3	-1068.2	-1.7020	µg/L	-1.7020	ppb	12:35:04
1	As 188.979†	3.1	2.5	11.567	µg/L	11.567	ppb	12:35:25
1	B 249.677†	1705.3	1576.5	18.024	µg/L	18.024	ppb	12:35:04
1	Ba 233.527†	26992.9	26791.2	778.68	µg/L	778.68	ppb	12:35:04
1	Be 313.107†	14936.3	10977.2	6.0333	µg/L	6.0333	ppb	12:35:04
1	Cd 226.502†	358.3	490.9	1.7893	µg/L	1.7893	ppb	12:35:25
1	Co 228.616†	798.2	836.8	37.349	µg/L	37.349	ppb	12:35:25
1	Cr 267.716†	8278.2	8294.7	192.50	µg/L	192.50	ppb	12:35:04
1	Cu 324.752†	9265.9	5523.5	57.241	µg/L	57.241	ppb	12:35:04
1	Mn 257.610†	769643.7	763667.0	2835.8	µg/L	2835.8	ppb	12:34:59
1	Mo 202.031†	95.0	77.0	13.970	µg/L	13.970	ppb	12:35:25
1	Ni 231.604†	2115.0	1762.7	112.47	µg/L	112.47	ppb	12:35:25
1	P 214.914†	694.6	486.6	1084.8	µg/L	1084.8	ppb	12:35:25
1	Pb 220.353†	444.5	385.0	111.13	µg/L	111.13	ppb	12:35:25
1	S 181.975 Axial†	171.6	144.8	829.78	µg/L	829.78	ppb	12:35:25
1	Sb 206.836†	21.8	-0.8	-3.8256	µg/L	-3.8256	ppb	12:35:25
1	Se 196.026†	-269.4	-279.6	-9.9107	µg/L	-9.9107	ppb	12:35:25
1	SiO2†	373842.2	368568.3	77795	µg/L	77795	ppb	12:34:59
1	Si 251.611†	431982.4	428216.9	35917	µg/L	35917	ppb	12:34:59
1	Sn 189.927†	-56.5	-79.5	-30.621	µg/L	-30.621	ppb	12:35:25
1	Ti 334.940†	1713766.7	1699262.8	4237.3	µg/L	4237.3	ppb	12:34:59
1	Tl 190.801†	-46.9	-23.4	1.1525	µg/L	1.1525	ppb	12:35:25
1	U 409.014†	-188.8	45.7	-12.251	µg/L	-12.251	ppb	12:34:59
1	V 292.402†	13814.3	13825.8	178.43	µg/L	178.43	ppb	12:35:04
1	Zn 213.857†	12698.0	11925.0	341.10	µg/L	341.10	ppb	12:35:04
2	Sc RADIAL	79036.7	79036.7	103	%			12:33:59
2	Al 396.153Radial†	86357.9	83963.5	58342	µg/L	58342	ppb	12:33:59
2	Ca 317.933Radial†	19534.7	18735.1	14752	µg/L	14752	ppb	12:33:59
2	Fe 238.204 Radial†	8047.1	7805.5	112060	µg/L	112060	ppb	12:34:19
2	K 766.490 Radial†	16185.7	15319.7	10170	µg/L	10170	ppb	12:33:59
2	Mg 279.077 IEC†	1051.9	1014.1	10932	µg/L	10932	ppb	12:34:19
2	Na 589.592 Radial†	2656.2	2036.7	584.88	µg/L	584.88	ppb	12:33:59
2	Sr 421.552†	21570.6	20407.8	129.67	µg/L	129.67	ppb	12:33:59
2	Sc 361.383	1958214.2	1958214.2	100.76	%			12:35:33
2	Y 371.029	1252795.3	1252795.3	101.95	%			12:35:33
2	Ag 328.068†	-1142.4	-1078.6	-1.8652	µg/L	-1.8652	ppb	12:35:38
2	As 188.979†	5.1	4.5	16.145	µg/L	16.145	ppb	12:35:59
2	B 249.677†	1679.3	1551.3	17.306	µg/L	17.306	ppb	12:35:38
2	Ba 233.527†	26797.2	26608.9	773.38	µg/L	773.38	ppb	12:35:38
2	Be 313.107†	14853.5	10901.6	5.9735	µg/L	5.9735	ppb	12:35:38
2	Cd 226.502†	362.9	495.7	2.0378	µg/L	2.0378	ppb	12:35:59
2	Co 228.616†	784.2	823.2	36.560	µg/L	36.560	ppb	12:35:59
2	Cr 267.716†	8230.9	8251.4	191.49	µg/L	191.49	ppb	12:35:38
2	Cu 324.752†	9227.3	5489.3	56.849	µg/L	56.849	ppb	12:35:38
2	Mn 257.610†	772161.9	766507.4	2846.1	µg/L	2846.1	ppb	12:35:33
2	Mo 202.031†	89.1	71.3	13.211	µg/L	13.211	ppb	12:35:59
2	Ni 231.604†	2097.2	1745.9	111.40	µg/L	111.40	ppb	12:35:59
2	P 214.914†	712.5	504.6	1128.8	µg/L	1128.8	ppb	12:35:59
2	Pb 220.353†	459.1	399.7	115.47	µg/L	115.47	ppb	12:35:59

2	S 181.975 Axial†	181.0	154.1	883.33 µg/L	883.33 ppb	12:35:59
2	Sb 206.836†	31.8	9.2	7.1619 µg/L	7.1619 ppb	12:35:59
2	Se 196.026†	-263.9	-274.3	-5.1858 µg/L	-5.1858 ppb	12:35:59
2	SiO2†	375174.9	370056.7	78109 µg/L	78109 ppb	12:35:33
2	Si 251.611†	433472.5	429887.3	36058 µg/L	36058 ppb	12:35:33
2	Sn 189.927†	-58.1	-81.1	-31.665 µg/L	-31.665 ppb	12:35:59
2	Ti 334.940†	1720583.2	1706787.7	4256.1 µg/L	4256.1 ppb	12:35:33
2	Tl 190.801†	-45.1	-21.7	4.3905 µg/L	4.3905 ppb	12:35:59
2	U 409.014†	-121.7	112.2	-5.7666 µg/L	-5.7666 ppb	12:35:33
2	V 292.402†	13748.5	13766.6	177.65 µg/L	177.65 ppb	12:35:38
2	Zn 213.857†	12572.8	11806.4	337.69 µg/L	337.69 ppb	12:35:38
3	Sc RADIAL	79042.0	79042.0	103 %		12:34:25
3	Al 396.153Radial†	86641.3	84233.3	58529 µg/L	58529 ppb	12:34:25
3	Ca 317.933Radial†	19607.1	18804.2	14807 µg/L	14807 ppb	12:34:25
3	Fe 238.204 Radial†	8067.1	7824.4	112330 µg/L	112330 ppb	12:34:45
3	K 766.490 Radial†	16244.4	15375.7	10207 µg/L	10207 ppb	12:34:25
3	Mg 279.077 IEC†	1051.4	1013.6	10926 µg/L	10926 ppb	12:34:45
3	Na 589.592 Radial†	2710.6	2089.5	600.02 µg/L	600.02 ppb	12:34:25
3	Sr 421.552†	21684.6	20517.2	130.36 µg/L	130.36 ppb	12:34:25
3	Sc 361.383	1954537.6	1954537.6	100.57 %		12:36:06
3	Y 371.029	1251161.0	1251161.0	101.82 %		12:36:06
3	Ag 328.068†	-1135.5	-1074.0	-1.8332 µg/L	-1.8332 ppb	12:36:12
3	As 188.979†	7.0	6.4	20.465 µg/L	20.465 ppb	12:36:33
3	B 249.677†	1652.6	1527.9	16.017 µg/L	16.017 ppb	12:36:12
3	Ba 233.527†	26311.4	26175.9	760.79 µg/L	760.79 ppb	12:36:12
3	Be 313.107†	14564.5	10642.0	5.8232 µg/L	5.8232 ppb	12:36:12
3	Cd 226.502†	315.7	449.3	0.6374 µg/L	0.6374 ppb	12:36:33
3	Co 228.616†	730.6	771.5	33.871 µg/L	33.871 ppb	12:36:33
3	Cr 267.716†	7981.6	8018.9	186.10 µg/L	186.10 ppb	12:36:12
3	Cu 324.752†	9172.8	5452.3	56.609 µg/L	56.609 ppb	12:36:12
3	Mn 257.610†	757187.9	753060.3	2796.5 µg/L	2796.5 ppb	12:36:06
3	Mo 202.031†	90.3	72.6	13.392 µg/L	13.392 ppb	12:36:33
3	Ni 231.604†	2004.0	1657.1	105.82 µg/L	105.82 ppb	12:36:33
3	P 214.914†	669.3	463.0	1029.1 µg/L	1029.1 ppb	12:36:33
3	Pb 220.353†	424.1	365.7	105.57 µg/L	105.57 ppb	12:36:33
3	S 181.975 Axial†	169.9	143.4	821.98 µg/L	821.98 ppb	12:36:33
3	Sb 206.836†	26.3	3.8	1.2467 µg/L	1.2467 ppb	12:36:33
3	Se 196.026†	-244.6	-255.6	25.466 µg/L	25.466 ppb	12:36:33
3	SiO2†	369736.3	365349.5	77115 µg/L	77115 ppb	12:36:06
3	Si 251.611†	427230.8	424490.4	35605 µg/L	35605 ppb	12:36:06
3	Sn 189.927†	-54.4	-77.5	-29.507 µg/L	-29.507 ppb	12:36:33
3	Ti 334.940†	1685007.0	1674626.2	4175.8 µg/L	4175.8 ppb	12:36:06
3	Tl 190.801†	-41.4	-18.1	9.6605 µg/L	9.6605 ppb	12:36:33
3	U 409.014†	-267.9	-33.4	-19.700 µg/L	-19.700 ppb	12:36:06
3	V 292.402†	13371.5	13417.4	173.29 µg/L	173.29 ppb	12:36:12
3	Zn 213.857†	12347.8	11606.1	331.87 µg/L	331.87 ppb	12:36:12

Mean Data: 244227009|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1957280.4	100.71	%	0.124				0.12%
Sc RADIAL	78936.3	103	%	0.2				0.23%
Y 371.029	1252280.8	101.91	%	0.079				0.08%
Ag 328.068†	-1073.6	-1.8001	µg/L	0.08648	-1.8001	ppb	0.08648	4.80%
Al 396.153Radial†	83967.4	58345	µg/L	183.4	58345	ppb	183.4	0.31%
As 188.979†	4.5	16.059	µg/L	4.4495	16.059	ppb	4.4495	27.71%
B 249.677†	1551.9	17.116	µg/L	1.0165	17.116	ppb	1.0165	5.94%
Ba 233.527†	26525.3	770.95	µg/L	9.187	770.95	ppb	9.187	1.19%
Be 313.107†	10840.3	5.9433	µg/L	0.10827	5.9433	ppb	0.10827	1.82%
Ca 317.933Radial†	18737.6	14754	µg/L	51.5	14754	ppb	51.5	0.35%
Cd 226.502†	478.6	1.4881	µg/L	0.74720	1.4881	ppb	0.74720	50.21%
Co 228.616†	810.5	35.927	µg/L	1.8233	35.927	ppb	1.8233	5.08%
Cr 267.716†	8188.3	190.03	µg/L	3.442	190.03	ppb	3.442	1.81%
Cu 324.752†	5488.3	56.900	µg/L	0.3193	56.900	ppb	0.3193	0.56%
Fe 238.204 Radial†	7834.3	112470	µg/L	500.1	112470	ppb	500.1	0.44%
K 766.490 Radial†	15300.4	10157	µg/L	57.5	10157	ppb	57.5	0.57%
Mg 279.077 IEC†	1015.1	10942	µg/L	22.5	10942	ppb	22.5	0.21%
Mn 257.610†	761078.2	2826.1	µg/L	26.19	2826.1	ppb	26.19	0.93%
Mo 202.031†	73.6	13.524	µg/L	0.3967	13.524	ppb	0.3967	2.93%
Na 589.592 Radial†	2058.9	591.23	µg/L	7.858	591.23	ppb	7.858	1.33%

Ni 231.604†	1721.9	109.90	µg/L	3.574	109.90	ppb	3.574	3.25%
P 214.914†	484.7	1080.9	µg/L	49.96	1080.9	ppb	49.96	4.62%
Pb 220.353†	383.5	110.72	µg/L	4.962	110.72	ppb	4.962	4.48%
S 181.975 Axial†	147.4	845.03	µg/L	33.395	845.03	ppb	33.395	3.95%
Sb 206.836†	4.1	1.5277	µg/L	5.49909	1.5277	ppb	5.49909	359.97%
Se 196.026†	-269.8	3.4566	µg/L	19.20683	3.4566	ppb	19.20683	555.65%
SiO2†	367991.5	77673	µg/L	507.8	77673	ppb	507.8	0.65%
Si 251.611†	427531.6	35860	µg/L	231.7	35860	ppb	231.7	0.65%
Sn 189.927†	-79.3	-30.597	µg/L	1.0791	-30.597	ppb	1.0791	3.53%
Sr 421.552†	20421.5	129.76	µg/L	0.570	129.76	ppb	0.570	0.44%
Ti 334.940†	1693558.9	4223.1	µg/L	41.95	4223.1	ppb	41.95	0.99%
Tl 190.801†	-21.1	5.0678	µg/L	4.29425	5.0678	ppb	4.29425	84.74%
U 409.014†	41.5	-12.573	µg/L	6.9725	-12.573	ppb	6.9725	55.46%
V 292.402†	13669.9	176.46	µg/L	2.769	176.46	ppb	2.769	1.57%
Zn 213.857†	11779.1	336.89	µg/L	4.669	336.89	ppb	4.669	1.39%

Sequence No.: 52
Sample ID: 244227010|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 342
Date Collected: 1/27/2010 12:36:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227010|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77388.8	77388.8	101	%			12:37:14
1	Al 396.153Radial†	43723.3	43429.7	30177	µg/L	30177	ppb	12:37:14
1	Ca 317.933Radial†	13097.0	12749.0	10039	µg/L	10039	ppb	12:37:35
1	Fe 238.204 Radial†	7584.7	7513.0	107860	µg/L	107860	ppb	12:37:35
1	K 766.490 Radial†	8488.0	8013.6	5319.7	µg/L	5319.7	ppb	12:37:14
1	Mg 279.077 IEC†	627.2	614.3	6579.7	µg/L	6579.7	ppb	12:37:35
1	Na 589.592 Radial†	2913.4	2347.0	673.97	µg/L	673.97	ppb	12:37:14
1	Sr 421.552†	11904.2	11258.9	71.538	µg/L	71.538	ppb	12:37:14
1	Sc 361.383	1970453.7	1970453.7	101.39	%			12:38:39
1	Y 371.029	1268315.1	1268315.1	103.22	%			12:38:39
1	Ag 328.068†	-1032.8	-963.5	-1.4913	µg/L	-1.4913	ppb	12:38:44
1	As 188.979†	2.5	1.9	10.116	µg/L	10.116	ppb	12:39:05
1	B 249.677†	1436.0	1301.1	7.1271	µg/L	7.1271	ppb	12:38:44
1	Ba 233.527†	10847.0	10712.5	311.42	µg/L	311.42	ppb	12:38:44
1	Be 313.107†	12597.4	8585.0	4.3437	µg/L	4.3437	ppb	12:38:44
1	Cd 226.502†	324.0	455.0	1.2453	µg/L	1.2453	ppb	12:39:05
1	Co 228.616†	388.7	428.4	14.680	µg/L	14.680	ppb	12:39:05
1	Cr 267.716†	2924.8	2967.4	68.894	µg/L	68.894	ppb	12:39:05
1	Cu 324.752†	5458.2	1715.0	27.888	µg/L	27.888	ppb	12:38:44
1	Mn 257.610†	466421.0	460205.2	1714.2	µg/L	1714.2	ppb	12:38:39
1	Mo 202.031†	81.6	63.3	12.048	µg/L	12.048	ppb	12:39:05
1	Ni 231.604†	993.7	644.6	41.990	µg/L	41.990	ppb	12:39:05
1	P 214.914†	607.5	396.7	869.06	µg/L	869.06	ppb	12:39:05
1	Pb 220.353†	307.3	247.1	69.638	µg/L	69.638	ppb	12:39:05
1	S 181.975 Axial†	101.7	74.8	428.88	µg/L	428.88	ppb	12:39:05
1	Sb 206.836†	23.3	0.6	-0.6838	µg/L	-0.6838	ppb	12:39:05
1	Se 196.026†	-250.6	-259.6	2.5895	µg/L	2.5895	ppb	12:39:05
1	SiO2†	296717.6	290364.0	61288	µg/L	61288	ppb	12:38:39
1	Si 251.611†	342397.7	337391.1	28299	µg/L	28299	ppb	12:38:39
1	Sn 189.927†	-33.3	-56.3	-19.431	µg/L	-19.431	ppb	12:39:05
1	Ti 334.940†	1748165.5	1723384.5	4297.7	µg/L	4297.7	ppb	12:38:39
1	Tl 190.801†	-44.1	-20.4	2.9280	µg/L	2.9280	ppb	12:39:05
1	U 409.014†	-379.0	-140.8	-29.041	µg/L	-29.041	ppb	12:38:39
1	V 292.402†	8466.2	8472.1	111.27	µg/L	111.27	ppb	12:38:44
1	Zn 213.857†	14782.7	13908.4	399.77	µg/L	399.77	ppb	12:38:44
2	Sc RADIAL	77538.7	77538.7	101	%			12:37:40
2	Al 396.153Radial†	43970.3	43590.5	30289	µg/L	30289	ppb	12:37:40
2	Ca 317.933Radial†	13064.5	12691.7	9993.7	µg/L	9993.7	ppb	12:38:00
2	Fe 238.204 Radial†	7570.1	7484.0	107440	µg/L	107440	ppb	12:38:00
2	K 766.490 Radial†	8524.9	8033.8	5333.1	µg/L	5333.1	ppb	12:37:40
2	Mg 279.077 IEC†	629.7	615.5	6593.2	µg/L	6593.2	ppb	12:38:00
2	Na 589.592 Radial†	2936.3	2364.2	678.90	µg/L	678.90	ppb	12:37:40
2	Sr 421.552†	11891.3	11223.4	71.312	µg/L	71.312	ppb	12:37:40
2	Sc 361.383	1957629.2	1957629.2	100.73	%			12:39:13
2	Y 371.029	1260554.0	1260554.0	102.58	%			12:39:13
2	Ag 328.068†	-1047.9	-985.2	-1.7112	µg/L	-1.7112	ppb	12:39:18
2	As 188.979†	3.0	2.4	11.196	µg/L	11.196	ppb	12:39:39
2	B 249.677†	1450.7	1324.9	8.5048	µg/L	8.5048	ppb	12:39:18
2	Ba 233.527†	10858.3	10793.9	313.79	µg/L	313.79	ppb	12:39:18
2	Be 313.107†	12647.3	8715.9	4.4322	µg/L	4.4322	ppb	12:39:18
2	Cd 226.502†	318.7	451.8	1.1998	µg/L	1.1998	ppb	12:39:39
2	Co 228.616†	384.3	426.5	14.562	µg/L	14.562	ppb	12:39:39
2	Cr 267.716†	2931.6	2993.1	69.490	µg/L	69.490	ppb	12:39:39
2	Cu 324.752†	5496.9	1788.7	28.383	µg/L	28.383	ppb	12:39:18
2	Mn 257.610†	464106.3	460920.9	1716.8	µg/L	1716.8	ppb	12:39:13
2	Mo 202.031†	95.3	77.4	13.801	µg/L	13.801	ppb	12:39:39
2	Ni 231.604†	1000.5	657.8	42.815	µg/L	42.815	ppb	12:39:39
2	P 214.914†	589.7	382.9	836.38	µg/L	836.38	ppb	12:39:39
2	Pb 220.353†	303.4	245.3	69.127	µg/L	69.127	ppb	12:39:39

2	S 181.975 Axial†	102.6	76.4	437.83	µg/L	437.83 ppb	12:39:39
2	Sb 206.836†	14.0	-8.5	-10.676	µg/L	-10.676 ppb	12:39:39
2	Se 196.026†	-250.4	-261.1	-1.3022	µg/L	-1.3022 ppb	12:39:39
2	SiO2†	295276.7	290850.8	61391	µg/L	61391 ppb	12:39:13
2	Si 251.611†	340785.0	338002.4	28351	µg/L	28351 ppb	12:39:13
2	Sn 189.927†	-35.2	-58.3	-20.670	µg/L	-20.670 ppb	12:39:39
2	Ti 334.940†	1739654.3	1726230.2	4304.8	µg/L	4304.8 ppb	12:39:13
2	Tl 190.801†	-41.1	-17.8	7.6207	µg/L	7.6207 ppb	12:39:39
2	U 409.014†	-383.8	-148.0	-29.672	µg/L	-29.672 ppb	12:39:13
2	V 292.402†	8512.3	8572.6	112.51	µg/L	112.51 ppb	12:39:18
2	Zn 213.857†	14776.7	13998.0	402.40	µg/L	402.40 ppb	12:39:18
3	Sc RADIAL	77687.6	77687.6	101	%		12:38:06
3	Al 396.153Radial†	44145.7	43680.5	30351	µg/L	30351 ppb	12:38:06
3	Ca 317.933Radial†	13114.1	12715.9	10013	µg/L	10013 ppb	12:38:26
3	Fe 238.204 Radial†	7590.7	7490.0	107530	µg/L	107530 ppb	12:38:26
3	K 766.490 Radial†	8597.4	8089.4	5370.0	µg/L	5370.0 ppb	12:38:06
3	Mg 279.077 IEC†	629.9	614.5	6582.1	µg/L	6582.1 ppb	12:38:26
3	Na 589.592 Radial†	2929.4	2351.7	675.33	µg/L	675.33 ppb	12:38:06
3	Sr 421.552†	11925.6	11234.7	71.384	µg/L	71.384 ppb	12:38:06
3	Sc 361.383	1965682.0	1965682.0	101.15	%		12:39:47
3	Y 371.029	1264760.2	1264760.2	102.93	%		12:39:47
3	Ag 328.068†	-1048.0	-981.0	-1.6824	µg/L	-1.6824 ppb	12:39:52
3	As 188.979†	2.7	2.2	10.694	µg/L	10.694 ppb	12:40:13
3	B 249.677†	1426.3	1294.9	6.9920	µg/L	6.9920 ppb	12:39:52
3	Ba 233.527†	10709.4	10602.5	308.22	µg/L	308.22 ppb	12:39:52
3	Be 313.107†	12403.8	8423.7	4.2561	µg/L	4.2561 ppb	12:39:52
3	Cd 226.502†	292.4	424.6	0.3854	µg/L	0.3854 ppb	12:40:13
3	Co 228.616†	362.4	403.3	13.432	µg/L	13.432 ppb	12:40:13
3	Cr 267.716†	2729.6	2781.5	64.580	µg/L	64.580 ppb	12:40:13
3	Cu 324.752†	5450.0	1720.0	27.879	µg/L	27.879 ppb	12:39:52
3	Mn 257.610†	458858.6	453845.3	1690.6	µg/L	1690.6 ppb	12:39:47
3	Mo 202.031†	78.9	60.8	11.729	µg/L	11.729 ppb	12:40:13
3	Ni 231.604†	948.1	602.0	39.299	µg/L	39.299 ppb	12:40:13
3	P 214.914†	586.6	377.5	823.26	µg/L	823.26 ppb	12:40:13
3	Pb 220.353†	295.4	236.2	66.466	µg/L	66.466 ppb	12:40:13
3	S 181.975 Axial†	100.6	74.0	423.97	µg/L	423.97 ppb	12:40:13
3	Sb 206.836†	23.8	1.2	0.0109	µg/L	0.0109 ppb	12:40:13
3	Se 196.026†	-236.7	-246.5	22.088	µg/L	22.088 ppb	12:40:13
3	SiO2†	292877.2	287277.6	60637	µg/L	60637 ppb	12:39:47
3	Si 251.611†	337978.0	333841.3	28002	µg/L	28002 ppb	12:39:47
3	Sn 189.927†	-32.6	-55.7	-19.114	µg/L	-19.114 ppb	12:40:13
3	Ti 334.940†	1717512.9	1697264.9	4232.6	µg/L	4232.6 ppb	12:39:47
3	Tl 190.801†	-35.8	-12.4	16.186	µg/L	16.186 ppb	12:40:13
3	U 409.014†	-380.1	-142.8	-29.184	µg/L	-29.184 ppb	12:39:47
3	V 292.402†	8356.2	8383.6	110.14	µg/L	110.14 ppb	12:39:52
3	Zn 213.857†	14570.7	13734.2	394.72	µg/L	394.72 ppb	12:39:52

Mean Data: 244227010|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1964588.3	101.09	%	0.334				0.33%
Sc RADIAL	77538.4	101	%	0.2				0.19%
Y 371.029	1264543.1	102.91	%	0.316				0.31%
Ag 328.068†	-976.6	-1.6283	µg/L	0.11951	-1.6283	ppb	0.11951	7.34%
Al 396.153Radial†	43566.9	30272	µg/L	88.3	30272	ppb	88.3	0.29%
As 188.979†	2.2	10.669	µg/L	0.5405	10.669	ppb	0.5405	5.07%
B 249.677†	1307.0	7.5413	µg/L	0.83712	7.5413	ppb	0.83712	11.10%
Ba 233.527†	10703.0	311.14	µg/L	2.793	311.14	ppb	2.793	0.90%
Be 313.107†	8574.9	4.3440	µg/L	0.08804	4.3440	ppb	0.08804	2.03%
Ca 317.933Radial†	12718.8	10015	µg/L	22.7	10015	ppb	22.7	0.23%
Cd 226.502†	443.8	0.9435	µg/L	0.48388	0.9435	ppb	0.48388	51.29%
Co 228.616†	419.4	14.225	µg/L	0.6889	14.225	ppb	0.6889	4.84%
Cr 267.716†	2914.0	67.655	µg/L	2.6792	67.655	ppb	2.6792	3.96%
Cu 324.752†	1741.2	28.050	µg/L	0.2887	28.050	ppb	0.2887	1.03%
Fe 238.204 Radial†	7495.7	107610	µg/L	220.0	107610	ppb	220.0	0.20%
K 766.490 Radial†	8045.6	5341.0	µg/L	26.04	5341.0	ppb	26.04	0.49%
Mg 279.077 IEC†	614.8	6585.0	µg/L	7.21	6585.0	ppb	7.21	0.11%
Mn 257.610†	458323.8	1707.2	µg/L	14.40	1707.2	ppb	14.40	0.84%
Mo 202.031†	67.2	12.526	µg/L	1.1155	12.526	ppb	1.1155	8.91%
Na 589.592 Radial†	2354.3	676.07	µg/L	2.543	676.07	ppb	2.543	0.38%

Ni 231.604†	634.8	41.368	µg/L	1.8387	41.368	ppb	1.8387	4.44%
P 214.914†	385.7	842.90	µg/L	23.589	842.90	ppb	23.589	2.80%
Pb 220.353†	242.8	68.410	µg/L	1.7034	68.410	ppb	1.7034	2.49%
S 181.975 Axial†	75.1	430.23	µg/L	7.026	430.23	ppb	7.026	1.63%
Sb 206.836†	-2.3	-3.7830	µg/L	5.97973	-3.7830	ppb	5.97973	158.07%
Se 196.026†	-255.7	7.7917	µg/L	12.53276	7.7917	ppb	12.53276	160.85%
SiO2†	289497.5	61105	µg/L	409.0	61105	ppb	409.0	0.67%
Si 251.611†	336411.6	28217	µg/L	188.5	28217	ppb	188.5	0.67%
Sn 189.927†	-56.8	-19.738	µg/L	0.8220	-19.738	ppb	0.8220	4.16%
Sr 421.552†	11239.0	71.412	µg/L	0.1153	71.412	ppb	0.1153	0.16%
Ti 334.940†	1715626.6	4278.4	µg/L	39.82	4278.4	ppb	39.82	0.93%
Tl 190.801†	-16.9	8.9114	µg/L	6.72238	8.9114	ppb	6.72238	75.44%
U 409.014†	-143.9	-29.299	µg/L	0.3310	-29.299	ppb	0.3310	1.13%
V 292.402†	8476.1	111.31	µg/L	1.187	111.31	ppb	1.187	1.07%
Zn 213.857†	13880.2	398.96	µg/L	3.902	398.96	ppb	3.902	0.98%

Sequence No.: 53
Sample ID: 244227011|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 343
Date Collected: 1/27/2010 12:40:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227011|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77004.1	77004.1	100	%			12:40:55
1	Al 396.153Radial†	35020.3	34964.4	24295	µg/L	24295	ppb	12:40:55
1	Ca 317.933Radial†	6361.1	6094.2	4798.7	µg/L	4798.7	ppb	12:41:15
1	Fe 238.204 Radial†	4454.1	4427.5	63564	µg/L	63564	ppb	12:41:15
1	K 766.490 Radial†	7212.4	6783.2	4502.9	µg/L	4502.9	ppb	12:40:55
1	Mg 279.077 IEC†	449.7	440.3	4730.4	µg/L	4730.4	ppb	12:41:15
1	Na 589.592 Radial†	1758.8	1209.7	347.38	µg/L	347.38	ppb	12:40:55
1	Sr 421.552†	6961.4	6387.0	40.583	µg/L	40.583	ppb	12:40:55
1	Sc 361.383	1957664.2	1957664.2	100.73	%			12:42:19
1	Y 371.029	1249579.4	1249579.4	101.69	%			12:42:19
1	Ag 328.068†	-652.5	-592.7	-1.1079	µg/L	-1.1079	ppb	12:42:25
1	As 188.979†	2.8	2.2	8.5750	µg/L	8.5750	ppb	12:42:45
1	B 249.677†	923.8	801.9	5.8817	µg/L	5.8817	ppb	12:42:25
1	Ba 233.527†	8805.8	8756.1	254.51	µg/L	254.51	ppb	12:42:25
1	Be 313.107†	9302.9	5395.7	2.7799	µg/L	2.7799	ppb	12:42:25
1	Cd 226.502†	149.0	283.4	1.1751	µg/L	1.1751	ppb	12:42:25
1	Co 228.616†	275.7	318.7	12.227	µg/L	12.227	ppb	12:42:45
1	Cr 267.716†	920.1	996.2	23.146	µg/L	23.146	ppb	12:42:25
1	Cu 324.752†	5248.1	1541.6	20.427	µg/L	20.427	ppb	12:42:25
1	Mn 257.610†	452976.6	449864.1	1670.2	µg/L	1670.2	ppb	12:42:19
1	Mo 202.031†	32.4	15.0	4.2957	µg/L	4.2957	ppb	12:42:45
1	Ni 231.604†	601.4	261.6	17.286	µg/L	17.286	ppb	12:42:45
1	P 214.914†	445.5	239.7	527.86	µg/L	527.86	ppb	12:42:45
1	Pb 220.353†	256.0	198.2	56.746	µg/L	56.746	ppb	12:42:45
1	S 181.975 Axial†	53.3	27.4	157.03	µg/L	157.03	ppb	12:42:45
1	Sb 206.836†	24.1	1.6	1.1757	µg/L	1.1757	ppb	12:42:45
1	Se 196.026†	-143.3	-154.7	-1.8004	µg/L	-1.8004	ppb	12:42:45
1	SiO2†	238210.8	234195.6	49432	µg/L	49432	ppb	12:42:19
1	Si 251.611†	274758.8	272451.4	22852	µg/L	22852	ppb	12:42:19
1	Sn 189.927†	-8.3	-31.6	-10.624	µg/L	-10.624	ppb	12:42:45
1	Ti 334.940†	1039027.7	1030680.1	2570.2	µg/L	2570.2	ppb	12:42:19
1	Tl 190.801†	-35.3	-11.9	5.1738	µg/L	5.1738	ppb	12:42:45
1	U 409.014†	-685.8	-447.9	-51.866	µg/L	-51.866	ppb	12:42:25
1	V 292.402†	4940.6	5026.7	65.898	µg/L	65.898	ppb	12:42:25
1	Zn 213.857†	9390.0	8650.2	248.80	µg/L	248.80	ppb	12:42:25
2	Sc RADIAL	76865.6	76865.6	100	%			12:41:21
2	Al 396.153Radial†	35182.9	35189.8	24452	µg/L	24452	ppb	12:41:21
2	Ca 317.933Radial†	6389.3	6133.8	4829.9	µg/L	4829.9	ppb	12:41:41
2	Fe 238.204 Radial†	4483.8	4465.2	64105	µg/L	64105	ppb	12:41:41
2	K 766.490 Radial†	7242.6	6826.3	4531.5	µg/L	4531.5	ppb	12:41:21
2	Mg 279.077 IEC†	445.7	437.2	4695.7	µg/L	4695.7	ppb	12:41:41
2	Na 589.592 Radial†	1741.0	1195.0	343.17	µg/L	343.17	ppb	12:41:21
2	Sr 421.552†	6923.9	6362.1	40.424	µg/L	40.424	ppb	12:41:21
2	Sc 361.383	1942325.5	1942325.5	99.945	%			12:42:52
2	Y 371.029	1239197.8	1239197.8	100.85	%			12:42:52
2	Ag 328.068†	-646.5	-591.8	-1.0599	µg/L	-1.0599	ppb	12:42:58
2	As 188.979†	5.3	4.7	14.336	µg/L	14.336	ppb	12:43:19
2	B 249.677†	910.2	795.5	5.2908	µg/L	5.2908	ppb	12:42:58
2	Ba 233.527†	8912.4	8931.8	259.61	µg/L	259.61	ppb	12:42:58
2	Be 313.107†	9364.4	5530.2	2.8711	µg/L	2.8711	ppb	12:42:58
2	Cd 226.502†	153.6	289.2	1.2848	µg/L	1.2848	ppb	12:42:58
2	Co 228.616†	281.4	326.6	12.650	µg/L	12.650	ppb	12:43:19
2	Cr 267.716†	942.8	1026.1	23.840	µg/L	23.840	ppb	12:42:58
2	Cu 324.752†	5302.9	1637.6	21.224	µg/L	21.224	ppb	12:42:58
2	Mn 257.610†	450525.9	450963.2	1674.3	µg/L	1674.3	ppb	12:42:52
2	Mo 202.031†	50.6	33.5	6.6399	µg/L	6.6399	ppb	12:43:19
2	Ni 231.604†	593.6	258.5	17.101	µg/L	17.101	ppb	12:43:19
2	P 214.914†	450.1	247.8	546.73	µg/L	546.73	ppb	12:43:19
2	Pb 220.353†	238.8	183.0	52.318	µg/L	52.318	ppb	12:43:19

2	S 181.975 Axial†	54.8	29.3	167.78 µg/L	167.78 ppb	12:43:19
2	Sb 206.836†	22.3	-0.1	-0.6430 µg/L	-0.6430 ppb	12:43:19
2	Se 196.026†	-140.3	-152.8	3.2594 µg/L	3.2594 ppb	12:43:19
2	SiO2†	237104.5	234956.2	49593 µg/L	49593 ppb	12:42:52
2	Si 251.611†	273280.7	273126.5	22909 µg/L	22909 ppb	12:42:52
2	Sn 189.927†	-11.4	-34.8	-12.432 µg/L	-12.432 ppb	12:43:19
2	Ti 334.940†	1033496.6	1033291.4	2576.7 µg/L	2576.7 ppb	12:42:52
2	Tl 190.801†	-35.4	-12.4	4.4488 µg/L	4.4488 ppb	12:43:19
2	U 409.014†	-733.1	-500.5	-56.970 µg/L	-56.970 ppb	12:42:58
2	V 292.402†	4966.0	5090.9	66.739 µg/L	66.739 ppb	12:42:58
2	Zn 213.857†	9485.5	8819.4	253.71 µg/L	253.71 ppb	12:42:58
3	Sc RADIAL	76307.9	76307.9	99.3 %		12:41:47
3	Al 396.153Radial†	35293.5	35558.2	24708 µg/L	24708 ppb	12:41:47
3	Ca 317.933Radial†	6380.8	6171.9	4859.9 µg/L	4859.9 ppb	12:42:07
3	Fe 238.204 Radial†	4473.4	4487.5	64425 µg/L	64425 ppb	12:42:07
3	K 766.490 Radial†	7297.2	6934.2	4603.2 µg/L	4603.2 ppb	12:41:47
3	Mg 279.077 IEC†	448.5	443.2	4760.7 µg/L	4760.7 ppb	12:42:07
3	Na 589.592 Radial†	1757.4	1224.3	351.56 µg/L	351.56 ppb	12:41:47
3	Sr 421.552†	7032.4	6521.9	41.440 µg/L	41.440 ppb	12:41:47
3	Sc 361.383	1961631.8	1961631.8	100.94 %		12:43:26
3	Y 371.029	1250863.4	1250863.4	101.80 %		12:43:26
3	Ag 328.068†	-632.0	-571.1	-0.8657 µg/L	-0.8657 ppb	12:43:32
3	As 188.979†	2.2	1.7	7.3197 µg/L	7.3197 ppb	12:43:52
3	B 249.677†	947.2	823.2	6.4651 µg/L	6.4651 ppb	12:43:32
3	Ba 233.527†	8682.2	8616.0	250.43 µg/L	250.43 ppb	12:43:32
3	Be 313.107†	9219.7	5294.6	2.7230 µg/L	2.7230 ppb	12:43:32
3	Cd 226.502†	139.2	273.4	0.7822 µg/L	0.7822 ppb	12:43:32
3	Co 228.616†	256.8	299.4	11.236 µg/L	11.236 ppb	12:43:52
3	Cr 267.716†	893.1	967.6	22.482 µg/L	22.482 ppb	12:43:32
3	Cu 324.752†	5208.7	1492.0	20.173 µg/L	20.173 ppb	12:43:32
3	Mn 257.610†	448321.4	444342.7	1649.9 µg/L	1649.9 ppb	12:43:26
3	Mo 202.031†	36.4	18.9	4.8192 µg/L	4.8192 ppb	12:43:52
3	Ni 231.604†	568.7	228.0	15.185 µg/L	15.185 ppb	12:43:52
3	P 214.914†	431.1	224.6	491.15 µg/L	491.15 ppb	12:43:52
3	Pb 220.353†	241.2	183.0	52.327 µg/L	52.327 ppb	12:43:52
3	S 181.975 Axial†	52.6	26.6	152.50 µg/L	152.50 ppb	12:43:52
3	Sb 206.836†	22.5	-0.1	-0.6917 µg/L	-0.6917 ppb	12:43:52
3	Se 196.026†	-137.9	-149.0	10.500 µg/L	10.500 ppb	12:43:52
3	SiO2†	236713.2	232233.6	49018 µg/L	49018 ppb	12:43:26
3	Si 251.611†	272856.3	270015.0	22648 µg/L	22648 ppb	12:43:26
3	Sn 189.927†	-7.3	-30.6	-9.9603 µg/L	-9.9603 ppb	12:43:52
3	Ti 334.940†	1026700.3	1016381.1	2534.5 µg/L	2534.5 ppb	12:43:26
3	Tl 190.801†	-32.5	-9.1	9.6122 µg/L	9.6122 ppb	12:43:52
3	U 409.014†	-728.8	-489.0	-55.916 µg/L	-55.916 ppb	12:43:32
3	V 292.402†	4784.6	4862.2	63.897 µg/L	63.897 ppb	12:43:32
3	Zn 213.857†	9219.5	8462.4	243.29 µg/L	243.29 ppb	12:43:32

Mean Data: 244227011|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1953873.8	100.54	%	0.525				0.52%
Sc RADIAL	76725.9	99.9	%	0.48				0.48%
Y 371.029	1246546.9	101.44	%	0.521				0.51%
Ag 328.068†	-585.2	-1.0112	µg/L	0.12826	-1.0112	ppb	0.12826	12.68%
Al 396.153Radial†	35237.5	24485	µg/L	208.3	24485	ppb	208.3	0.85%
As 188.979†	2.9	10.077	µg/L	3.7413	10.077	ppb	3.7413	37.13%
B 249.677†	806.9	5.8792	µg/L	0.58719	5.8792	ppb	0.58719	9.99%
Ba 233.527†	8768.0	254.85	µg/L	4.600	254.85	ppb	4.600	1.81%
Be 313.107†	5406.8	2.7913	µg/L	0.07468	2.7913	ppb	0.07468	2.68%
Ca 317.933Radial†	6133.3	4829.5	µg/L	30.59	4829.5	ppb	30.59	0.63%
Cd 226.502†	282.0	1.0807	µg/L	0.26426	1.0807	ppb	0.26426	24.45%
Co 228.616†	314.9	12.038	µg/L	0.7260	12.038	ppb	0.7260	6.03%
Cr 267.716†	996.7	23.156	µg/L	0.6792	23.156	ppb	0.6792	2.93%
Cu 324.752†	1557.1	20.608	µg/L	0.5481	20.608	ppb	0.5481	2.66%
Fe 238.204 Radial†	4460.1	64031	µg/L	435.4	64031	ppb	435.4	0.68%
K 766.490 Radial†	6847.9	4545.9	µg/L	51.64	4545.9	ppb	51.64	1.14%
Mg 279.077 IEC†	440.2	4728.9	µg/L	32.55	4728.9	ppb	32.55	0.69%
Mn 257.610†	448390.0	1664.8	µg/L	13.07	1664.8	ppb	13.07	0.79%
Mo 202.031†	22.4	5.2516	µg/L	1.23046	5.2516	ppb	1.23046	23.43%
Na 589.592 Radial†	1209.7	347.37	µg/L	4.199	347.37	ppb	4.199	1.21%

Ni 231.604†	249.4	16.524 µg/L	1.1633	16.524 ppb	1.1633	7.04%
P 214.914†	237.4	521.91 µg/L	28.265	521.91 ppb	28.265	5.42%
Pb 220.353†	188.1	53.797 µg/L	2.5540	53.797 ppb	2.5540	4.75%
S 181.975 Axial†	27.8	159.11 µg/L	7.847	159.11 ppb	7.847	4.93%
Sb 206.836†	0.4	-0.0530 µg/L	1.06440	-0.0530 ppb	1.06440	>999.9%
Se 196.026†	-152.2	3.9864 µg/L	6.18244	3.9864 ppb	6.18244	155.09%
SiO2†	233795.1	49348 µg/L	296.5	49348 ppb	296.5	0.60%
Si 251.611†	271864.3	22803 µg/L	137.3	22803 ppb	137.3	0.60%
Sn 189.927†	-32.4	-11.005 µg/L	1.2792	-11.005 ppb	1.2792	11.62%
Sr 421.552†	6423.7	40.815 µg/L	0.5463	40.815 ppb	0.5463	1.34%
Ti 334.940†	1026784.2	2560.5 µg/L	22.71	2560.5 ppb	22.71	0.89%
Tl 190.801†	-11.1	6.4116 µg/L	2.79543	6.4116 ppb	2.79543	43.60%
U 409.014†	-479.1	-54.918 µg/L	2.6949	-54.918 ppb	2.6949	4.91%
V 292.402†	4993.3	65.511 µg/L	1.4602	65.511 ppb	1.4602	2.23%
Zn 213.857†	8644.0	248.60 µg/L	5.210	248.60 ppb	5.210	2.10%

Sequence No.: 54
Sample ID: 244227012|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 344
Date Collected: 1/27/2010 12:44:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227012|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	79269.2	79269.2	103	%			12:44:34
1	Al 396.153Radial†	162694.6	157695.0	109570	µg/L	109570	ppb	12:44:34
1	Ca 317.933Radial†	37219.8	35817.9	28204	µg/L	28204	ppb	12:44:54
1	Fe 238.204 Radial†	10194.3	9863.4	141610	µg/L	141610	ppb	12:44:54
1	K 766.490 Radial†	26486.8	25256.4	16766	µg/L	16766	ppb	12:44:34
1	Mg 279.077 IEC†	1852.2	1786.7	19320	µg/L	19320	ppb	12:44:54
1	Na 589.592 Radial†	4037.7	3368.0	967.17	µg/L	967.17	ppb	12:44:54
1	Sr 421.552†	53072.7	50874.9	323.25	µg/L	323.25	ppb	12:44:34
1	Sc 361.383	1970703.8	1970703.8	101.41	%			12:46:00
1	Y 371.029	1275488.9	1275488.9	103.80	%			12:46:00
1	Ag 328.068†	-1472.4	-1396.9	-2.2781	µg/L	-2.2781	ppb	12:46:06
1	As 188.979†	6.6	6.0	20.603	µg/L	20.603	ppb	12:46:26
1	B 249.677†	2184.1	2038.6	25.493	µg/L	25.493	ppb	12:46:06
1	Ba 233.527†	70012.7	69057.0	2006.8	µg/L	2006.8	ppb	12:46:06
1	Be 313.107†	22538.9	18387.2	10.582	µg/L	10.582	ppb	12:46:06
1	Cd 226.502†	463.5	592.5	1.5209	µg/L	1.5209	ppb	12:46:26
1	Co 228.616†	1263.7	1291.2	59.055	µg/L	59.055	ppb	12:46:26
1	Cr 267.716†	5455.8	5463.0	126.89	µg/L	126.89	ppb	12:46:06
1	Cu 324.752†	10333.1	6521.7	68.718	µg/L	68.718	ppb	12:46:06
1	Mn 257.610†	1216897.0	1200222.7	4452.0	µg/L	4452.0	ppb	12:46:00
1	Mo 202.031†	6.4	-10.9	4.0179	µg/L	4.0179	ppb	12:46:26
1	Ni 231.604†	1626.2	1268.2	81.660	µg/L	81.660	ppb	12:46:26
1	P 214.914†	861.4	646.9	1459.1	µg/L	1459.1	ppb	12:46:26
1	Pb 220.353†	607.0	542.7	158.87	µg/L	158.87	ppb	12:46:26
1	S 181.975 Axial†	213.2	184.7	1058.9	µg/L	1058.9	ppb	12:46:26
1	Sb 206.836†	25.8	3.0	0.0111	µg/L	0.0111	ppb	12:46:26
1	Se 196.026†	-325.9	-333.8	13.812	µg/L	13.812	ppb	12:46:26
1	SiO2†	407905.4	399973.8	84424	µg/L	84424	ppb	12:46:00
1	Si 251.611†	471579.2	464739.6	38981	µg/L	38981	ppb	12:46:00
1	Sn 189.927†	-112.2	-134.1	-55.308	µg/L	-55.308	ppb	12:46:26
1	Ti 334.940†	2379262.1	2345516.6	5848.6	µg/L	5848.6	ppb	12:46:00
1	Tl 190.801†	-51.4	-27.6	11.637	µg/L	11.637	ppb	12:46:26
1	U 409.014†	-721.5	-478.5	-67.069	µg/L	-67.069	ppb	12:46:00
1	V 292.402†	22394.4	22206.2	283.87	µg/L	283.87	ppb	12:46:06
1	Zn 213.857†	10941.4	10118.4	286.72	µg/L	286.72	ppb	12:46:06
2	Sc RADIAL	79542.5	79542.5	104	%			12:45:00
2	Al 396.153Radial†	163007.0	157455.0	109410	µg/L	109410	ppb	12:45:00
2	Ca 317.933Radial†	37001.2	35482.9	27940	µg/L	27940	ppb	12:45:21
2	Fe 238.204 Radial†	10143.4	9780.3	140410	µg/L	140410	ppb	12:45:21
2	K 766.490 Radial†	26570.1	25248.6	16761	µg/L	16761	ppb	12:45:00
2	Mg 279.077 IEC†	1845.0	1773.5	19178	µg/L	19178	ppb	12:45:21
2	Na 589.592 Radial†	4029.9	3347.0	961.13	µg/L	961.13	ppb	12:45:21
2	Sr 421.552†	53114.6	50738.7	322.39	µg/L	322.39	ppb	12:45:00
2	Sc 361.383	1962804.0	1962804.0	101.00	%			12:46:34
2	Y 371.029	1269576.6	1269576.6	103.32	%			12:46:34
2	Ag 328.068†	-1398.3	-1329.3	-1.7160	µg/L	-1.7160	ppb	12:46:40
2	As 188.979†	8.0	7.4	23.679	µg/L	23.679	ppb	12:47:00
2	B 249.677†	2119.5	1983.3	23.426	µg/L	23.426	ppb	12:46:40
2	Ba 233.527†	69880.4	69203.9	2011.1	µg/L	2011.1	ppb	12:46:40
2	Be 313.107†	22508.9	18446.9	10.633	µg/L	10.633	ppb	12:46:40
2	Cd 226.502†	469.9	600.7	1.8954	µg/L	1.8954	ppb	12:47:00
2	Co 228.616†	1265.2	1297.7	59.466	µg/L	59.466	ppb	12:47:00
2	Cr 267.716†	5429.3	5458.4	126.78	µg/L	126.78	ppb	12:46:40
2	Cu 324.752†	10361.5	6590.8	69.072	µg/L	69.072	ppb	12:46:40
2	Mn 257.610†	1206023.7	1194286.8	4429.9	µg/L	4429.9	ppb	12:46:34
2	Mo 202.031†	0.8	-16.4	3.2717	µg/L	3.2717	ppb	12:47:00
2	Ni 231.604†	1615.0	1263.6	81.353	µg/L	81.353	ppb	12:47:00
2	P 214.914†	881.3	670.1	1515.3	µg/L	1515.3	ppb	12:47:00
2	Pb 220.353†	605.4	543.4	159.12	µg/L	159.12	ppb	12:47:00

2	S 181.975 Axial†	214.5	186.8	1071.0 µg/L	1071.0 ppb	12:47:00
2	Sb 206.836†	27.6	4.9	2.1322 µg/L	2.1322 ppb	12:47:00
2	Se 196.026†	-330.7	-339.8	-0.2587 µg/L	-0.2587 ppb	12:47:00
2	SiO2†	404742.6	398461.3	84104 µg/L	84104 ppb	12:46:34
2	Si 251.611†	467876.0	462944.7	38830 µg/L	38830 ppb	12:46:34
2	Sn 189.927†	-111.0	-133.3	-55.059 µg/L	-55.059 ppb	12:47:00
2	Ti 334.940†	2359884.4	2335773.8	5824.3 µg/L	5824.3 ppb	12:46:34
2	Tl 190.801†	-53.5	-29.9	7.3968 µg/L	7.3968 ppb	12:47:00
2	U 409.014†	-710.0	-470.0	-66.074 µg/L	-66.074 ppb	12:46:34
2	V 292.402†	22399.8	22300.4	284.97 µg/L	284.97 ppb	12:46:40
2	Zn 213.857†	10948.4	10168.8	288.26 µg/L	288.26 ppb	12:46:40
3	Sc RADIAL	78939.1	78939.1	103 %		12:45:26
3	Al 396.153Radial†	161532.9	157223.9	109250 µg/L	109250 ppb	12:45:26
3	Ca 317.933Radial†	37050.4	35804.0	28193 µg/L	28193 ppb	12:45:47
3	Fe 238.204 Radial†	10143.6	9855.4	141490 µg/L	141490 ppb	12:45:47
3	K 766.490 Radial†	26342.6	25223.3	16744 µg/L	16744 ppb	12:45:26
3	Mg 279.077 IEC†	1856.2	1798.0	19444 µg/L	19444 ppb	12:45:47
3	Na 589.592 Radial†	4038.6	3385.2	972.11 µg/L	972.11 ppb	12:45:47
3	Sr 421.552†	52461.6	50495.4	320.84 µg/L	320.84 ppb	12:45:26
3	Sc 361.383	1977184.0	1977184.0	101.74 %		12:47:08
3	Y 371.029	1278516.8	1278516.8	104.05 %		12:47:08
3	Ag 328.068†	-1370.1	-1291.6	-1.3693 µg/L	-1.3693 ppb	12:47:13
3	As 188.979†	11.2	10.4	30.851 µg/L	30.851 ppb	12:47:34
3	B 249.677†	2091.7	1940.7	20.781 µg/L	20.781 ppb	12:47:13
3	Ba 233.527†	68044.0	66895.7	1944.0 µg/L	1944.0 ppb	12:47:13
3	Be 313.107†	21880.1	17666.7	10.114 µg/L	10.114 ppb	12:47:13
3	Cd 226.502†	433.1	561.1	0.6057 µg/L	0.6057 ppb	12:47:34
3	Co 228.616†	1174.1	1199.0	54.154 µg/L	54.154 ppb	12:47:34
3	Cr 267.716†	5218.0	5211.6	121.05 µg/L	121.05 ppb	12:47:13
3	Cu 324.752†	10213.7	6371.0	67.569 µg/L	67.569 ppb	12:47:13
3	Mn 257.610†	1204385.6	1183992.0	4392.0 µg/L	4392.0 ppb	12:47:08
3	Mo 202.031†	1.1	-16.1	3.3581 µg/L	3.3581 ppb	12:47:34
3	Ni 231.604†	1568.2	1205.9	77.742 µg/L	77.742 ppb	12:47:34
3	P 214.914†	838.9	622.1	1399.8 µg/L	1399.8 ppb	12:47:34
3	Pb 220.353†	576.8	511.0	149.61 µg/L	149.61 ppb	12:47:34
3	S 181.975 Axial†	204.3	175.3	1004.8 µg/L	1004.8 ppb	12:47:34
3	Sb 206.836†	21.0	-1.7	-5.1716 µg/L	-5.1716 ppb	12:47:34
3	Se 196.026†	-310.1	-317.2	39.533 µg/L	39.533 ppb	12:47:34
3	SiO2†	405255.9	396051.3	83596 µg/L	83596 ppb	12:47:08
3	Si 251.611†	468505.7	460194.4	38600 µg/L	38600 ppb	12:47:08
3	Sn 189.927†	-99.6	-121.3	-47.818 µg/L	-47.818 ppb	12:47:34
3	Ti 334.940†	2350662.0	2309715.4	5759.3 µg/L	5759.3 ppb	12:47:08
3	Tl 190.801†	-45.0	-21.2	21.673 µg/L	21.673 ppb	12:47:34
3	U 409.014†	-762.9	-516.9	-70.714 µg/L	-70.714 ppb	12:47:08
3	V 292.402†	21660.2	21412.2	273.97 µg/L	273.97 ppb	12:47:13
3	Zn 213.857†	10688.2	9834.2	278.46 µg/L	278.46 ppb	12:47:13

Mean Data: 244227012|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1970230.6	101.38	%	0.371				0.37%
Sc RADIAL	79250.3	103	%	0.4				0.38%
Y 371.029	1274527.4	103.72	%	0.370				0.36%
Ag 328.068†	-1339.3	-1.7878	µg/L	0.45861	-1.7878	ppb	0.45861	25.65%
Al 396.153Radial†	157458.0	109410	µg/L	163.7	109410	ppb	163.7	0.15%
As 188.979†	7.9	25.044	µg/L	5.2589	25.044	ppb	5.2589	21.00%
B 249.677†	1987.6	23.233	µg/L	2.3621	23.233	ppb	2.3621	10.17%
Ba 233.527†	68385.5	1987.3	µg/L	37.56	1987.3	ppb	37.56	1.89%
Be 313.107†	18166.9	10.443	µg/L	0.2860	10.443	ppb	0.2860	2.74%
Ca 317.933Radial†	35701.6	28112	µg/L	149.2	28112	ppb	149.2	0.53%
Cd 226.502†	584.8	1.3407	µg/L	0.66349	1.3407	ppb	0.66349	49.49%
Co 228.616†	1262.7	57.558	µg/L	2.9556	57.558	ppb	2.9556	5.13%
Cr 267.716†	5377.7	124.90	µg/L	3.340	124.90	ppb	3.340	2.67%
Cu 324.752†	6494.5	68.453	µg/L	0.7858	68.453	ppb	0.7858	1.15%
Fe 238.204 Radial†	9833.0	141170	µg/L	658.6	141170	ppb	658.6	0.47%
K 766.490 Radial†	25242.8	16757	µg/L	11.5	16757	ppb	11.5	0.07%
Mg 279.077 IEC†	1786.1	19314	µg/L	133.1	19314	ppb	133.1	0.69%
Mn 257.610†	1192833.8	4424.6	µg/L	30.34	4424.6	ppb	30.34	0.69%
Mo 202.031†	-14.5	3.5493	µg/L	0.40814	3.5493	ppb	0.40814	11.50%
Na 589.592 Radial†	3366.7	966.80	µg/L	5.497	966.80	ppb	5.497	0.57%

Ni 231.604†	1245.9	80.252	µg/L	2.1787	80.252	ppb	2.1787	2.71%
P 214.914†	646.4	1458.1	µg/L	57.77	1458.1	ppb	57.77	3.96%
Pb 220.353†	532.4	155.87	µg/L	5.416	155.87	ppb	5.416	3.48%
S 181.975 Axial†	182.3	1044.9	µg/L	35.23	1044.9	ppb	35.23	3.37%
Sb 206.836†	2.1	-1.0094	µg/L	3.75729	-1.0094	ppb	3.75729	372.22%
Se 196.026†	-330.3	17.695	µg/L	20.1780	17.695	ppb	20.1780	114.03%
SiO2†	398162.1	84041	µg/L	417.6	84041	ppb	417.6	0.50%
Si 251.611†	462626.2	38804	µg/L	192.0	38804	ppb	192.0	0.49%
Sn 189.927†	-129.6	-52.728	µg/L	4.2546	-52.728	ppb	4.2546	8.07%
Sr 421.552†	50703.0	322.16	µg/L	1.222	322.16	ppb	1.222	0.38%
Ti 334.940†	2330335.3	5810.7	µg/L	46.17	5810.7	ppb	46.17	0.79%
Tl 190.801†	-26.2	13.569	µg/L	7.3318	13.569	ppb	7.3318	54.03%
U 409.014†	-488.5	-67.952	µg/L	2.4429	-67.952	ppb	2.4429	3.59%
V 292.402†	21972.9	280.94	µg/L	6.061	280.94	ppb	6.061	2.16%
Zn 213.857†	10040.5	284.48	µg/L	5.272	284.48	ppb	5.272	1.85%

Sequence No.: 55
Sample ID: 244227013|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 345
Date Collected: 1/27/2010 12:47:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227013|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78192.9	78192.9	102	%			12:48:16
1	Al 396.153Radial†	147279.8	144721.3	100560	µg/L	100560	ppb	12:48:16
1	Ca 317.933Radial†	22838.0	22185.3	17469	µg/L	17469	ppb	12:48:36
1	Fe 238.204 Radial†	9767.1	9579.7	137530	µg/L	137530	ppb	12:48:36
1	K 766.490 Radial†	26209.1	25336.9	16820	µg/L	16820	ppb	12:48:16
1	Mg 279.077 IEC†	1830.9	1790.4	19366	µg/L	19366	ppb	12:48:36
1	Na 589.592 Radial†	3760.7	3149.7	904.48	µg/L	904.48	ppb	12:48:36
1	Sr 421.552†	30117.5	29030.9	184.46	µg/L	184.46	ppb	12:48:16
1	Sc 361.383	1943888.0	1943888.0	100.03	%			12:49:42
1	Y 371.029	1244261.8	1244261.8	101.26	%			12:49:42
1	Ag 328.068†	-1337.7	-1282.3	-2.1383	µg/L	-2.1383	ppb	12:49:48
1	As 188.979†	6.4	5.9	20.573	µg/L	20.573	ppb	12:50:08
1	B 249.677†	2095.0	1979.3	24.752	µg/L	24.752	ppb	12:49:48
1	Ba 233.527†	33420.9	33427.0	971.47	µg/L	971.47	ppb	12:49:48
1	Be 313.107†	19389.9	15545.6	9.4766	µg/L	9.4766	ppb	12:49:48
1	Cd 226.502†	416.1	551.4	0.7730	µg/L	0.7730	ppb	12:50:08
1	Co 228.616†	644.5	689.3	30.627	µg/L	30.627	ppb	12:50:08
1	Cr 267.716†	5977.0	6058.3	140.63	µg/L	140.63	ppb	12:49:48
1	Cu 324.752†	9476.3	5805.7	62.769	µg/L	62.769	ppb	12:49:48
1	Mn 257.610†	421488.4	421570.7	1574.9	µg/L	1574.9	ppb	12:49:42
1	Mo 202.031†	14.5	-2.7	4.8830	µg/L	4.8830	ppb	12:50:08
1	Ni 231.604†	1637.1	1301.3	83.729	µg/L	83.729	ppb	12:50:08
1	P 214.914†	697.0	494.3	1095.3	µg/L	1095.3	ppb	12:50:08
1	Pb 220.353†	337.8	281.7	82.483	µg/L	82.483	ppb	12:50:08
1	S 181.975 Axial†	107.8	82.2	471.34	µg/L	471.34	ppb	12:50:08
1	Sb 206.836†	30.2	7.8	5.9014	µg/L	5.9014	ppb	12:50:08
1	Se 196.026†	-319.4	-331.7	-1.1107	µg/L	-1.1107	ppb	12:50:08
1	SiO2†	402070.5	399689.6	84364	µg/L	84364	ppb	12:49:42
1	Si 251.611†	464896.6	464473.9	38959	µg/L	38959	ppb	12:49:42
1	Sn 189.927†	-65.5	-88.9	-31.647	µg/L	-31.647	ppb	12:50:08
1	Ti 334.940†	1426259.6	1425123.4	3553.0	µg/L	3553.0	ppb	12:49:42
1	Tl 190.801†	-43.7	-20.6	-6.1701	µg/L	-6.1701	ppb	12:50:08
1	U 409.014†	-1147.5	-914.2	-107.43	µg/L	-107.43	ppb	12:49:42
1	V 292.402†	13900.6	14019.2	181.85	µg/L	181.85	ppb	12:49:48
1	Zn 213.857†	12778.7	12104.1	344.80	µg/L	344.80	ppb	12:49:48
2	Sc RADIAL	78867.3	78867.3	103	%			12:48:42
2	Al 396.153Radial†	149623.2	145766.6	101290	µg/L	101290	ppb	12:48:42
2	Ca 317.933Radial†	22766.5	21923.7	17263	µg/L	17263	ppb	12:49:02
2	Fe 238.204 Radial†	9728.3	9459.9	135810	µg/L	135810	ppb	12:49:02
2	K 766.490 Radial†	26561.0	25459.4	16901	µg/L	16901	ppb	12:48:42
2	Mg 279.077 IEC†	1827.2	1771.5	19161	µg/L	19161	ppb	12:49:02
2	Na 589.592 Radial†	3759.6	3117.0	895.10	µg/L	895.10	ppb	12:49:02
2	Sr 421.552†	30598.9	29246.8	185.83	µg/L	185.83	ppb	12:48:42
2	Sc 361.383	1954614.9	1954614.9	100.58	%			12:50:16
2	Y 371.029	1251235.0	1251235.0	101.83	%			12:50:16
2	Ag 328.068†	-1319.3	-1256.7	-2.0097	µg/L	-2.0097	ppb	12:50:21
2	As 188.979†	7.0	6.4	21.668	µg/L	21.668	ppb	12:50:42
2	B 249.677†	2037.7	1910.8	22.318	µg/L	22.318	ppb	12:50:21
2	Ba 233.527†	33462.2	33284.6	967.33	µg/L	967.33	ppb	12:50:21
2	Be 313.107†	19381.7	15431.0	9.3976	µg/L	9.3976	ppb	12:50:21
2	Cd 226.502†	402.8	535.9	0.5110	µg/L	0.5110	ppb	12:50:42
2	Co 228.616†	641.6	683.0	30.281	µg/L	30.281	ppb	12:50:42
2	Cr 267.716†	5988.5	6036.9	140.13	µg/L	140.13	ppb	12:50:21
2	Cu 324.752†	9467.9	5745.3	62.076	µg/L	62.076	ppb	12:50:21
2	Mn 257.610†	423629.5	421387.0	1574.0	µg/L	1574.0	ppb	12:50:16
2	Mo 202.031†	10.8	-6.5	4.3455	µg/L	4.3455	ppb	12:50:42
2	Ni 231.604†	1647.7	1302.8	83.804	µg/L	83.804	ppb	12:50:42
2	P 214.914†	693.8	487.4	1080.5	µg/L	1080.5	ppb	12:50:42
2	Pb 220.353†	334.4	276.5	81.067	µg/L	81.067	ppb	12:50:42

2	S 181.975 Axial†	106.0	79.9	458.03 µg/L	458.03 ppb	12:50:42
2	Sb 206.836†	25.3	2.7	0.3054 µg/L	0.3054 ppb	12:50:42
2	Se 196.026†	-313.4	-324.1	4.4219 µg/L	4.4219 ppb	12:50:42
2	SiO2†	403895.7	399298.2	84281 µg/L	84281 ppb	12:50:16
2	Si 251.611†	466820.7	463836.3	38905 µg/L	38905 ppb	12:50:16
2	Sn 189.927†	-58.2	-81.2	-27.398 µg/L	-27.398 ppb	12:50:42
2	Ti 334.940†	1433300.4	1424298.4	3550.9 µg/L	3550.9 ppb	12:50:16
2	Tl 190.801†	-40.1	-16.8	0.5218 µg/L	0.5218 ppb	12:50:42
2	U 409.014†	-1223.9	-983.9	-113.83 µg/L	-113.83 ppb	12:50:16
2	V 292.402†	13953.3	13995.3	181.45 µg/L	181.45 ppb	12:50:21
2	Zn 213.857†	12845.9	12100.8	344.80 µg/L	344.80 ppb	12:50:21
3	Sc RADIAL	77792.6	77792.6	101 %		12:49:08
3	Al 396.153Radial†	147889.2	146067.5	101490 µg/L	101490 ppb	12:49:08
3	Ca 317.933Radial†	22823.5	22286.4	17549 µg/L	17549 ppb	12:49:28
3	Fe 238.204 Radial†	9762.8	9624.8	138180 µg/L	138180 ppb	12:49:28
3	K 766.490 Radial†	26285.0	25544.3	16957 µg/L	16957 ppb	12:49:08
3	Mg 279.077 IEC†	1829.9	1798.7	19455 µg/L	19455 ppb	12:49:28
3	Na 589.592 Radial†	3787.3	3195.0	917.49 µg/L	917.49 ppb	12:49:28
3	Sr 421.552†	30162.8	29227.9	185.71 µg/L	185.71 ppb	12:49:08
3	Sc 361.383	1955830.3	1955830.3	100.64 %		12:50:50
3	Y 371.029	1251719.5	1251719.5	101.87 %		12:50:50
3	Ag 328.068†	-1324.7	-1261.2	-1.9423 µg/L	-1.9423 ppb	12:50:55
3	As 188.979†	5.4	4.8	18.197 µg/L	18.197 ppb	12:51:16
3	B 249.677†	2028.6	1900.5	20.571 µg/L	20.571 ppb	12:50:55
3	Ba 233.527†	32590.6	32397.9	941.56 µg/L	941.56 ppb	12:50:55
3	Be 313.107†	18923.5	14963.8	9.0946 µg/L	9.0946 ppb	12:50:55
3	Cd 226.502†	382.0	515.1	-0.3759 µg/L	-0.3759 ppb	12:51:16
3	Co 228.616†	599.9	641.1	28.095 µg/L	28.095 ppb	12:51:16
3	Cr 267.716†	5746.0	5792.3	134.45 µg/L	134.45 ppb	12:50:55
3	Cu 324.752†	9345.2	5617.5	61.444 µg/L	61.444 ppb	12:50:55
3	Mn 257.610†	417357.7	414893.3	1550.3 µg/L	1550.3 ppb	12:50:50
3	Mo 202.031†	12.8	-4.4	4.6944 µg/L	4.6944 ppb	12:51:16
3	Ni 231.604†	1557.1	1211.8	78.102 µg/L	78.102 ppb	12:51:16
3	P 214.914†	673.2	466.4	1028.6 µg/L	1028.6 ppb	12:51:16
3	Pb 220.353†	328.6	270.6	79.257 µg/L	79.257 ppb	12:51:16
3	S 181.975 Axial†	103.6	77.5	444.11 µg/L	444.11 ppb	12:51:16
3	Sb 206.836†	30.6	8.0	6.1431 µg/L	6.1431 ppb	12:51:16
3	Se 196.026†	-292.9	-303.4	46.044 µg/L	46.044 ppb	12:51:16
3	SiO2†	399672.8	394852.6	83343 µg/L	83343 ppb	12:50:50
3	Si 251.611†	462043.0	458800.5	38483 µg/L	38483 ppb	12:50:50
3	Sn 189.927†	-50.5	-73.6	-22.621 µg/L	-22.621 ppb	12:51:16
3	Ti 334.940†	1410394.1	1400652.2	3491.9 µg/L	3491.9 ppb	12:50:50
3	Tl 190.801†	-29.9	-6.7	17.207 µg/L	17.207 ppb	12:51:16
3	U 409.014†	-1114.2	-874.1	-103.69 µg/L	-103.69 ppb	12:50:50
3	V 292.402†	13482.1	13518.5	175.64 µg/L	175.64 ppb	12:50:55
3	Zn 213.857†	12465.7	11715.2	333.46 µg/L	333.46 ppb	12:50:55

Mean Data: 244227013|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1951444.4	100.41	%	0.338				0.34%
Sc RADIAL	78284.2	102	%	0.7				0.69%
Y 371.029	1249072.1	101.65	%	0.340				0.33%
Ag 328.068†	-1266.7	-2.0301	µg/L	0.09961	-2.0301	ppb	0.09961	4.91%
Al 396.153Radial†	145518.5	101110	µg/L	491.0	101110	ppb	491.0	0.49%
As 188.979†	5.7	20.146	µg/L	1.7742	20.146	ppb	1.7742	8.81%
B 249.677†	1930.2	22.547	µg/L	2.0997	22.547	ppb	2.0997	9.31%
Ba 233.527†	33036.5	960.12	µg/L	16.206	960.12	ppb	16.206	1.69%
Be 313.107†	15313.5	9.3229	µg/L	0.20169	9.3229	ppb	0.20169	2.16%
Ca 317.933Radial†	22131.8	17427	µg/L	147.4	17427	ppb	147.4	0.85%
Cd 226.502†	534.1	0.3027	µg/L	0.60211	0.3027	ppb	0.60211	198.91%
Co 228.616†	671.1	29.668	µg/L	1.3725	29.668	ppb	1.3725	4.63%
Cr 267.716†	5962.5	138.40	µg/L	3.431	138.40	ppb	3.431	2.48%
Cu 324.752†	5722.9	62.096	µg/L	0.6627	62.096	ppb	0.6627	1.07%
Fe 238.204 Radial†	9554.8	137170	µg/L	1224.0	137170	ppb	1224.0	0.89%
K 766.490 Radial†	25446.8	16893	µg/L	69.2	16893	ppb	69.2	0.41%
Mg 279.077 IEC†	1786.9	19327	µg/L	150.8	19327	ppb	150.8	0.78%
Mn 257.610†	419283.7	1566.4	µg/L	13.94	1566.4	ppb	13.94	0.89%
Mo 202.031†	-4.6	4.6410	µg/L	0.27272	4.6410	ppb	0.27272	5.88%
Na 589.592 Radial†	3153.9	905.69	µg/L	11.247	905.69	ppb	11.247	1.24%

Ni 231.604†	1271.9	81.878	µg/L	3.2709	81.878	ppb	3.2709	3.99%
P 214.914†	482.7	1068.1	µg/L	35.03	1068.1	ppb	35.03	3.28%
Pb 220.353†	276.3	80.936	µg/L	1.6166	80.936	ppb	1.6166	2.00%
S 181.975 Axial†	79.9	457.83	µg/L	13.612	457.83	ppb	13.612	2.97%
Sb 206.836†	6.2	4.1166	µg/L	3.30284	4.1166	ppb	3.30284	80.23%
Se 196.026†	-319.7	16.452	µg/L	25.7764	16.452	ppb	25.7764	156.68%
SiO2†	397946.8	83996	µg/L	567.1	83996	ppb	567.1	0.68%
Si 251.611†	462370.2	38782	µg/L	260.7	38782	ppb	260.7	0.67%
Sn 189.927†	-81.3	-27.222	µg/L	4.5158	-27.222	ppb	4.5158	16.59%
Sr 421.552†	29168.5	185.33	µg/L	0.760	185.33	ppb	0.760	0.41%
Ti 334.940†	1416691.3	3531.9	µg/L	34.66	3531.9	ppb	34.66	0.98%
Tl 190.801†	-14.7	3.8527	µg/L	12.03905	3.8527	ppb	12.03905	312.48%
U 409.014†	-924.1	-108.31	µg/L	5.125	-108.31	ppb	5.125	4.73%
V 292.402†	13844.3	179.64	µg/L	3.473	179.64	ppb	3.473	1.93%
Zn 213.857†	11973.4	341.02	µg/L	6.551	341.02	ppb	6.551	1.92%

Sequence No.: 56
Sample ID: 244227014|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 346
Date Collected: 1/27/2010 12:51:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227014|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77088.7	77088.7	100	%			12:51:58
1	Al 396.153Radial†	64058.7	63863.1	44375	µg/L	44375	ppb	12:51:58
1	Ca 317.933Radial†	13246.9	12949.0	10196	µg/L	10196	ppb	12:52:18
1	Fe 238.204 Radial†	7776.3	7733.2	111020	µg/L	111020	ppb	12:52:18
1	K 766.490 Radial†	10099.5	9652.2	6407.5	µg/L	6407.5	ppb	12:51:58
1	Mg 279.077 IEC†	802.6	791.4	8506.7	µg/L	8506.7	ppb	12:52:18
1	Na 589.592 Radial†	3354.0	2797.3	803.29	µg/L	803.29	ppb	12:51:58
1	Sr 421.552†	14062.0	13455.3	85.494	µg/L	85.494	ppb	12:51:58
1	Sc 361.383	1928677.2	1928677.2	99.243	%			12:53:23
1	Y 371.029	1260145.1	1260145.1	102.55	%			12:53:23
1	Ag 328.068†	-1115.9	-1069.3	-2.2067	µg/L	-2.2067	ppb	12:53:29
1	As 188.979†	9.7	9.3	27.274	µg/L	27.274	ppb	12:53:49
1	B 249.677†	1559.6	1456.3	12.998	µg/L	12.998	ppb	12:53:29
1	Ba 233.527†	17087.2	17232.1	500.86	µg/L	500.86	ppb	12:53:29
1	Be 313.107†	17035.1	13325.7	7.6973	µg/L	7.6973	ppb	12:53:29
1	Cd 226.502†	326.7	464.7	1.1670	µg/L	1.1670	ppb	12:53:49
1	Co 228.616†	529.6	578.7	23.253	µg/L	23.253	ppb	12:53:49
1	Cr 267.716†	2015.2	2113.4	49.091	µg/L	49.091	ppb	12:53:49
1	Cu 324.752†	6081.8	2460.0	33.928	µg/L	33.928	ppb	12:53:29
1	Mn 257.610†	812734.7	819125.7	3040.5	µg/L	3040.5	ppb	12:53:23
1	Mo 202.031†	71.6	54.9	11.117	µg/L	11.117	ppb	12:53:49
1	Ni 231.604†	854.1	525.2	34.497	µg/L	34.497	ppb	12:53:49
1	P 214.914†	583.5	385.5	843.12	µg/L	843.12	ppb	12:53:49
1	Pb 220.353†	282.9	229.1	65.128	µg/L	65.128	ppb	12:53:49
1	S 181.975 Axial†	118.1	93.4	535.67	µg/L	535.67	ppb	12:53:49
1	Sb 206.836†	21.3	-0.9	-2.1121	µg/L	-2.1121	ppb	12:53:49
1	Se 196.026†	-254.7	-269.1	-1.0691	µg/L	-1.0691	ppb	12:53:49
1	SiO2†	373986.6	374561.5	79060	µg/L	79060	ppb	12:53:23
1	Si 251.611†	432109.6	435102.3	36495	µg/L	36495	ppb	12:53:23
1	Sn 189.927†	-32.4	-56.1	-18.617	µg/L	-18.617	ppb	12:53:49
1	Ti 334.940†	1658123.4	1670001.9	4164.4	µg/L	4164.4	ppb	12:53:23
1	Tl 190.801†	-41.3	-18.5	10.488	µg/L	10.488	ppb	12:53:49
1	U 409.014†	-1162.0	-937.9	-105.56	µg/L	-105.56	ppb	12:53:23
1	V 292.402†	9153.5	9345.4	122.17	µg/L	122.17	ppb	12:53:29
1	Zn 213.857†	13391.7	12822.6	367.88	µg/L	367.88	ppb	12:53:29
2	Sc RADIAL	77746.0	77746.0	101	%			12:52:24
2	Al 396.153Radial†	64482.1	63741.7	44291	µg/L	44291	ppb	12:52:24
2	Ca 317.933Radial†	13224.1	12814.8	10091	µg/L	10091	ppb	12:52:44
2	Fe 238.204 Radial†	7752.6	7644.3	109750	µg/L	109750	ppb	12:52:44
2	K 766.490 Radial†	10207.1	9673.5	6421.6	µg/L	6421.6	ppb	12:52:24
2	Mg 279.077 IEC†	807.5	789.6	8487.6	µg/L	8487.6	ppb	12:52:44
2	Na 589.592 Radial†	3395.1	2809.7	806.85	µg/L	806.85	ppb	12:52:24
2	Sr 421.552†	14119.5	13393.6	85.102	µg/L	85.102	ppb	12:52:24
2	Sc 361.383	1944854.3	1944854.3	100.08	%			12:53:57
2	Y 371.029	1270125.3	1270125.3	103.36	%			12:53:57
2	Ag 328.068†	-1053.2	-997.3	-1.6287	µg/L	-1.6287	ppb	12:54:03
2	As 188.979†	8.1	7.5	23.175	µg/L	23.175	ppb	12:54:23
2	B 249.677†	1557.1	1440.7	12.903	µg/L	12.903	ppb	12:54:03
2	Ba 233.527†	16989.4	16991.1	493.85	µg/L	493.85	ppb	12:54:03
2	Be 313.107†	17023.4	13171.2	7.5981	µg/L	7.5981	ppb	12:54:03
2	Cd 226.502†	316.8	452.0	0.9368	µg/L	0.9368	ppb	12:54:23
2	Co 228.616†	527.9	572.5	22.956	µg/L	22.956	ppb	12:54:23
2	Cr 267.716†	2020.9	2102.2	48.831	µg/L	48.831	ppb	12:54:23
2	Cu 324.752†	6046.0	2373.2	33.099	µg/L	33.099	ppb	12:54:03
2	Mn 257.610†	815399.0	814976.2	3025.0	µg/L	3025.0	ppb	12:53:57
2	Mo 202.031†	64.1	46.9	10.057	µg/L	10.057	ppb	12:54:23
2	Ni 231.604†	846.8	510.8	33.571	µg/L	33.571	ppb	12:54:23
2	P 214.914†	584.8	381.9	835.59	µg/L	835.59	ppb	12:54:23
2	Pb 220.353†	274.2	218.1	61.947	µg/L	61.947	ppb	12:54:23

2	S 181.975 Axial†	123.2	97.5	559.16 µg/L	559.16 ppb	12:54:23
2	Sb 206.836†	20.0	-2.5	-3.8464 µg/L	-3.8464 ppb	12:54:23
2	Se 196.026†	-255.6	-267.8	-3.9727 µg/L	-3.9727 ppb	12:54:23
2	SiO2†	375061.7	372501.3	78625 µg/L	78625 ppb	12:53:57
2	Si 251.611†	433411.5	432781.6	36300 µg/L	36300 ppb	12:53:57
2	Sn 189.927†	-32.5	-55.9	-18.632 µg/L	-18.632 ppb	12:54:23
2	Ti 334.940†	1663186.0	1661163.4	4142.4 µg/L	4142.4 ppb	12:53:57
2	Tl 190.801†	-45.4	-22.3	3.7450 µg/L	3.7450 ppb	12:54:23
2	U 409.014†	-1177.2	-943.4	-105.90 µg/L	-105.90 ppb	12:53:57
2	V 292.402†	9074.5	9189.8	120.15 µg/L	120.15 ppb	12:54:03
2	Zn 213.857†	13303.3	12622.0	362.10 µg/L	362.10 ppb	12:54:03
3	Sc RADIAL	77551.6	77551.6	101 %		12:52:50
3	Al 396.153Radial†	64111.3	63534.1	44147 µg/L	44147 ppb	12:52:50
3	Ca 317.933Radial†	13255.1	12878.4	10141 µg/L	10141 ppb	12:53:10
3	Fe 238.204 Radial†	7789.6	7700.2	110550 µg/L	110550 ppb	12:53:10
3	K 766.490 Radial†	10112.2	9604.8	6376.0 µg/L	6376.0 ppb	12:52:50
3	Mg 279.077 IEC†	805.7	789.8	8489.2 µg/L	8489.2 ppb	12:53:10
3	Na 589.592 Radial†	3322.7	2746.4	788.66 µg/L	788.66 ppb	12:52:50
3	Sr 421.552†	14041.0	13350.8	84.830 µg/L	84.830 ppb	12:52:50
3	Sc 361.383	1938803.0	1938803.0	99.764 %		12:54:31
3	Y 371.029	1266319.4	1266319.4	103.05 %		12:54:31
3	Ag 328.068†	-1077.2	-1024.7	-1.8582 µg/L	-1.8582 ppb	12:54:36
3	As 188.979†	6.3	5.8	19.264 µg/L	19.264 ppb	12:54:57
3	B 249.677†	1463.5	1351.8	8.1513 µg/L	8.1513 ppb	12:54:36
3	Ba 233.527†	16544.6	16598.3	482.43 µg/L	482.43 ppb	12:54:36
3	Be 313.107†	16504.2	12703.9	7.2990 µg/L	7.2990 ppb	12:54:36
3	Cd 226.502†	287.8	424.0	0.0186 µg/L	0.0186 ppb	12:54:57
3	Co 228.616†	482.7	528.8	20.693 µg/L	20.693 ppb	12:54:57
3	Cr 267.716†	1855.7	1942.9	45.135 µg/L	45.135 ppb	12:54:57
3	Cu 324.752†	5977.1	2323.1	32.833 µg/L	32.833 ppb	12:54:36
3	Mn 257.610†	800825.2	802910.9	2980.5 µg/L	2980.5 ppb	12:54:31
3	Mo 202.031†	64.4	47.4	10.152 µg/L	10.152 ppb	12:54:57
3	Ni 231.604†	815.6	482.1	31.779 µg/L	31.779 ppb	12:54:57
3	P 214.914†	559.2	358.0	777.86 µg/L	777.86 ppb	12:54:57
3	Pb 220.353†	259.6	204.3	57.859 µg/L	57.859 ppb	12:54:57
3	S 181.975 Axial†	118.3	93.1	533.56 µg/L	533.56 ppb	12:54:57
3	Sb 206.836†	21.9	-0.4	-1.5592 µg/L	-1.5592 ppb	12:54:57
3	Se 196.026†	-246.9	-259.9	11.669 µg/L	11.669 ppb	12:54:57
3	SiO2†	370131.6	368729.2	77829 µg/L	77829 ppb	12:54:31
3	Si 251.611†	427469.2	428176.9	35914 µg/L	35914 ppb	12:54:31
3	Sn 189.927†	-27.2	-50.7	-15.539 µg/L	-15.539 ppb	12:54:57
3	Ti 334.940†	1630142.6	1633228.8	4072.7 µg/L	4072.7 ppb	12:54:31
3	Tl 190.801†	-38.9	-15.9	13.953 µg/L	13.953 ppb	12:54:57
3	U 409.014†	-1016.4	-785.9	-90.978 µg/L	-90.978 ppb	12:54:31
3	V 292.402†	8740.6	8883.4	116.39 µg/L	116.39 ppb	12:54:36
3	Zn 213.857†	12955.4	12314.8	353.11 µg/L	353.11 ppb	12:54:36

Mean Data: 244227014|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1937444.8	99.694	%	0.4206				0.42%
Sc RADIAL	77462.1	101	%	0.4				0.44%
Y 371.029	1265529.9	102.99	%	0.410				0.40%
Ag 328.068†	-1030.4	-1.8979	µg/L	0.29104	-1.8979	ppb	0.29104	15.34%
Al 396.153Radial†	63713.0	44271	µg/L	115.6	44271	ppb	115.6	0.26%
As 188.979†	7.5	23.238	µg/L	4.0052	23.238	ppb	4.0052	17.24%
B 249.677†	1416.3	11.351	µg/L	2.7711	11.351	ppb	2.7711	24.41%
Ba 233.527†	16940.5	492.38	µg/L	9.299	492.38	ppb	9.299	1.89%
Be 313.107†	13066.9	7.5315	µg/L	0.20732	7.5315	ppb	0.20732	2.75%
Ca 317.933Radial†	12880.7	10143	µg/L	52.9	10143	ppb	52.9	0.52%
Cd 226.502†	446.9	0.7075	µg/L	0.60759	0.7075	ppb	0.60759	85.88%
Co 228.616†	560.0	22.301	µg/L	1.4002	22.301	ppb	1.4002	6.28%
Cr 267.716†	2052.8	47.686	µg/L	2.2130	47.686	ppb	2.2130	4.64%
Cu 324.752†	2385.4	33.287	µg/L	0.5713	33.287	ppb	0.5713	1.72%
Fe 238.204 Radial†	7692.6	110440	µg/L	645.2	110440	ppb	645.2	0.58%
K 766.490 Radial†	9643.5	6401.7	µg/L	23.35	6401.7	ppb	23.35	0.36%
Mg 279.077 IEC†	790.3	8494.5	µg/L	10.58	8494.5	ppb	10.58	0.12%
Mn 257.610†	812337.6	3015.3	µg/L	31.13	3015.3	ppb	31.13	1.03%
Mo 202.031†	49.7	10.442	µg/L	0.5866	10.442	ppb	0.5866	5.62%
Na 589.592 Radial†	2784.5	799.60	µg/L	9.644	799.60	ppb	9.644	1.21%

Ni 231.604†	506.0	33.282	µg/L	1.3817	33.282	ppb	1.3817	4.15%
P 214.914†	375.1	818.86	µg/L	35.701	818.86	ppb	35.701	4.36%
Pb 220.353†	217.2	61.645	µg/L	3.6439	61.645	ppb	3.6439	5.91%
S 181.975 Axial†	94.7	542.80	µg/L	14.214	542.80	ppb	14.214	2.62%
Sb 206.836†	-1.3	-2.5059	µg/L	1.19333	-2.5059	ppb	1.19333	47.62%
Se 196.026†	-265.6	2.2092	µg/L	8.32044	2.2092	ppb	8.32044	376.62%
SiO2†	371930.7	78505	µg/L	624.3	78505	ppb	624.3	0.80%
Si 251.611†	432020.3	36236	µg/L	295.7	36236	ppb	295.7	0.82%
Sn 189.927†	-54.2	-17.596	µg/L	1.7815	-17.596	ppb	1.7815	10.12%
Sr 421.552†	13399.9	85.142	µg/L	0.3336	85.142	ppb	0.3336	0.39%
Ti 334.940†	1654798.0	4126.5	µg/L	47.87	4126.5	ppb	47.87	1.16%
Tl 190.801†	-18.9	9.3955	µg/L	5.19117	9.3955	ppb	5.19117	55.25%
U 409.014†	-889.1	-100.81	µg/L	8.517	-100.81	ppb	8.517	8.45%
V 292.402†	9139.5	119.57	µg/L	2.930	119.57	ppb	2.930	2.45%
Zn 213.857†	12586.4	361.03	µg/L	7.442	361.03	ppb	7.442	2.06%

Sequence No.: 57
Sample ID: 244227015|940174|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 347
Date Collected: 1/27/2010 12:55:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244227015|940174|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77898.1	77898.1	101	%			12:55:39
1	Al 396.153Radial†	81560.4	80459.3	55907	µg/L	55907	ppb	12:55:39
1	Ca 317.933Radial†	11775.9	11361.2	8946.0	µg/L	8946.0	ppb	12:55:59
1	Fe 238.204 Radial†	7616.5	7495.2	107600	µg/L	107600	ppb	12:55:59
1	K 766.490 Radial†	17030.1	16382.3	10875	µg/L	10875	ppb	12:55:39
1	Mg 279.077 IEC†	988.3	966.3	10415	µg/L	10415	ppb	12:55:59
1	Na 589.592 Radial†	5881.0	5254.6	1508.9	µg/L	1508.9	ppb	12:55:39
1	Sr 421.552†	16654.3	15866.1	100.81	µg/L	100.81	ppb	12:55:39
1	Sc 361.383	1950204.8	1950204.8	100.35	%			12:57:05
1	Y 371.029	1246836.8	1246836.8	101.47	%			12:57:05
1	Ag 328.068†	-1057.7	-998.9	-1.6258	µg/L	-1.6258	ppb	12:57:10
1	As 188.979†	5.0	4.4	15.967	µg/L	15.967	ppb	12:57:31
1	B 249.677†	1584.4	1463.7	15.333	µg/L	15.333	ppb	12:57:10
1	Ba 233.527†	23226.2	23159.6	673.11	µg/L	673.11	ppb	12:57:10
1	Be 313.107†	13513.3	9626.7	5.2367	µg/L	5.2367	ppb	12:57:10
1	Cd 226.502†	304.7	439.1	0.8645	µg/L	0.8645	ppb	12:57:31
1	Co 228.616†	730.5	773.0	34.609	µg/L	34.609	ppb	12:57:31
1	Cr 267.716†	7300.9	7358.2	170.75	µg/L	170.75	ppb	12:57:10
1	Cu 324.752†	10924.7	7218.3	69.231	µg/L	69.231	ppb	12:57:10
1	Mn 257.610†	686622.9	684414.4	2542.3	µg/L	2542.3	ppb	12:57:05
1	Mo 202.031†	23.9	6.6	4.9173	µg/L	4.9173	ppb	12:57:31
1	Ni 231.604†	1906.8	1564.7	99.932	µg/L	99.932	ppb	12:57:31
1	P 214.914†	454.7	250.6	522.51	µg/L	522.51	ppb	12:57:31
1	Pb 220.353†	301.9	244.9	70.375	µg/L	70.375	ppb	12:57:31
1	S 181.975 Axial†	88.0	62.2	356.57	µg/L	356.57	ppb	12:57:31
1	Sb 206.836†	25.2	2.8	0.5428	µg/L	0.5428	ppb	12:57:31
1	Se 196.026†	-252.7	-264.3	-7.5450	µg/L	-7.5450	ppb	12:57:31
1	SiO2†	382605.1	378990.1	79995	µg/L	79995	ppb	12:57:05
1	Si 251.611†	442099.6	440251.1	36927	µg/L	36927	ppb	12:57:05
1	Sn 189.927†	-40.3	-63.6	-23.195	µg/L	-23.195	ppb	12:57:31
1	Ti 334.940†	1553588.6	1547389.1	3858.5	µg/L	3858.5	ppb	12:57:05
1	Tl 190.801†	-43.4	-20.1	3.4988	µg/L	3.4988	ppb	12:57:31
1	U 409.014†	-924.9	-688.7	-81.228	µg/L	-81.228	ppb	12:57:05
1	V 292.402†	10968.7	11052.5	143.47	µg/L	143.47	ppb	12:57:10
1	Zn 213.857†	11529.6	10818.0	309.15	µg/L	309.15	ppb	12:57:10
2	Sc RADIAL	78039.2	78039.2	102	%			12:56:05
2	Al 396.153Radial†	80733.4	79499.7	55240	µg/L	55240	ppb	12:56:05
2	Ca 317.933Radial†	11778.8	11343.1	8931.8	µg/L	8931.8	ppb	12:56:25
2	Fe 238.204 Radial†	7603.2	7468.5	107220	µg/L	107220	ppb	12:56:25
2	K 766.490 Radial†	16916.2	16239.8	10781	µg/L	10781	ppb	12:56:05
2	Mg 279.077 IEC†	993.1	969.2	10448	µg/L	10448	ppb	12:56:25
2	Na 589.592 Radial†	5813.9	5178.1	1487.0	µg/L	1487.0	ppb	12:56:05
2	Sr 421.552†	16456.6	15641.7	99.386	µg/L	99.386	ppb	12:56:05
2	Sc 361.383	1935971.5	1935971.5	99.618	%			12:57:39
2	Y 371.029	1238126.3	1238126.3	100.76	%			12:57:39
2	Ag 328.068†	-1056.3	-1005.2	-1.7059	µg/L	-1.7059	ppb	12:57:44
2	As 188.979†	0.9	0.3	6.4962	µg/L	6.4962	ppb	12:58:05
2	B 249.677†	1477.0	1367.5	10.854	µg/L	10.854	ppb	12:57:44
2	Ba 233.527†	23099.8	23202.9	674.36	µg/L	674.36	ppb	12:57:44
2	Be 313.107†	13424.4	9636.5	5.2456	µg/L	5.2456	ppb	12:57:44
2	Cd 226.502†	297.3	433.9	0.7557	µg/L	0.7557	ppb	12:58:05
2	Co 228.616†	716.7	764.4	34.148	µg/L	34.148	ppb	12:58:05
2	Cr 267.716†	7291.3	7402.0	171.77	µg/L	171.77	ppb	12:57:44
2	Cu 324.752†	10949.2	7322.9	69.964	µg/L	69.964	ppb	12:57:44
2	Mn 257.610†	679805.5	682601.3	2535.5	µg/L	2535.5	ppb	12:57:39
2	Mo 202.031†	20.0	2.9	4.4426	µg/L	4.4426	ppb	12:58:05
2	Ni 231.604†	1897.4	1569.3	100.22	µg/L	100.22	ppb	12:58:05
2	P 214.914†	458.1	257.4	538.71	µg/L	538.71	ppb	12:58:05
2	Pb 220.353†	293.2	238.4	68.463	µg/L	68.463	ppb	12:58:05

2	S 181.975 Axial†	77.6	52.4	300.21 µg/L	300.21 ppb	12:58:05
2	Sb 206.836†	20.3	-2.0	-4.7743 µg/L	-4.7743 ppb	12:58:05
2	Se 196.026†	-243.9	-257.3	2.0131 µg/L	2.0131 ppb	12:58:05
2	SiO2†	379463.7	378639.7	79921 µg/L	79921 ppb	12:57:39
2	Si 251.611†	438385.8	439762.0	36886 µg/L	36886 ppb	12:57:39
2	Sn 189.927†	-35.4	-59.0	-20.553 µg/L	-20.553 ppb	12:58:05
2	Ti 334.940†	1540085.8	1545216.6	3853.0 µg/L	3853.0 ppb	12:57:39
2	Tl 190.801†	-43.7	-20.8	2.2416 µg/L	2.2416 ppb	12:58:05
2	U 409.014†	-937.5	-708.1	-83.022 µg/L	-83.022 ppb	12:57:39
2	V 292.402†	10922.1	11086.1	143.86 µg/L	143.86 ppb	12:57:44
2	Zn 213.857†	11525.1	10898.0	311.50 µg/L	311.50 ppb	12:57:44
3	Sc RADIAL	77603.8	77603.8	101 %		12:56:31
3	Al 396.153Radial†	80908.1	80118.5	55670 µg/L	55670 ppb	12:56:31
3	Ca 317.933Radial†	11780.7	11410.0	8984.5 µg/L	8984.5 ppb	12:56:51
3	Fe 238.204 Radial†	7603.8	7511.0	107830 µg/L	107830 ppb	12:56:51
3	K 766.490 Radial†	16877.3	16294.8	10817 µg/L	10817 ppb	12:56:31
3	Mg 279.077 IEC†	990.1	971.8	10476 µg/L	10476 ppb	12:56:51
3	Na 589.592 Radial†	5852.3	5248.3	1507.1 µg/L	1507.1 ppb	12:56:31
3	Sr 421.552†	16555.6	15830.7	100.59 µg/L	100.59 ppb	12:56:31
3	Sc 361.383	1931607.5	1931607.5	99.394 %		12:58:13
3	Y 371.029	1233472.9	1233472.9	100.38 %		12:58:13
3	Ag 328.068†	-1016.5	-967.6	-1.3361 µg/L	-1.3361 ppb	12:58:18
3	As 188.979†	6.0	5.5	18.403 µg/L	18.403 ppb	12:58:39
3	B 249.677†	1475.7	1369.5	10.628 µg/L	10.628 ppb	12:58:18
3	Ba 233.527†	22803.7	22957.3	667.23 µg/L	667.23 ppb	12:58:18
3	Be 313.107†	13169.4	9410.3	5.1040 µg/L	5.1040 ppb	12:58:18
3	Cd 226.502†	273.3	410.5	-0.0078 µg/L	-0.0078 ppb	12:58:39
3	Co 228.616†	677.0	726.1	32.123 µg/L	32.123 ppb	12:58:39
3	Cr 267.716†	7094.3	7220.4	167.56 µg/L	167.56 ppb	12:58:18
3	Cu 324.752†	10879.2	7277.4	69.706 µg/L	69.706 ppb	12:58:18
3	Mn 257.610†	673039.2	677335.4	2516.2 µg/L	2516.2 ppb	12:58:13
3	Mo 202.031†	30.1	13.1	5.7375 µg/L	5.7375 ppb	12:58:39
3	Ni 231.604†	1828.3	1504.0	96.115 µg/L	96.115 ppb	12:58:39
3	P 214.914†	444.6	244.9	508.43 µg/L	508.43 ppb	12:58:39
3	Pb 220.353†	278.4	224.1	64.306 µg/L	64.306 ppb	12:58:39
3	S 181.975 Axial†	81.6	56.6	324.51 µg/L	324.51 ppb	12:58:39
3	Sb 206.836†	24.8	2.5	0.3357 µg/L	0.3357 ppb	12:58:39
3	Se 196.026†	-233.2	-247.0	20.521 µg/L	20.521 ppb	12:58:39
3	SiO2†	376846.3	376867.0	79546 µg/L	79546 ppb	12:58:13
3	Si 251.611†	435352.3	437704.2	36713 µg/L	36713 ppb	12:58:13
3	Sn 189.927†	-35.4	-59.0	-20.494 µg/L	-20.494 ppb	12:58:39
3	Ti 334.940†	1519916.8	1528417.4	3811.1 µg/L	3811.1 ppb	12:58:13
3	Tl 190.801†	-46.9	-24.1	-3.8254 µg/L	-3.8254 ppb	12:58:39
3	U 409.014†	-891.9	-664.3	-78.933 µg/L	-78.933 ppb	12:58:13
3	V 292.402†	10665.7	10852.9	141.00 µg/L	141.00 ppb	12:58:18
3	Zn 213.857†	11352.2	10750.2	307.17 µg/L	307.17 ppb	12:58:18

Mean Data: 244227015|940174|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1939261.3	99.787	%	0.5004				0.50%
Sc RADIAL	77847.0	101	%	0.3				0.29%
Y 371.029	1239478.7	100.87	%	0.552				0.55%
Ag 328.068†	-990.6	-1.5560	µg/L	0.19454	-1.5560	ppb	0.19454	12.50%
Al 396.153Radial†	80025.8	55606	µg/L	338.0	55606	ppb	338.0	0.61%
As 188.979†	3.4	13.622	µg/L	6.2904	13.622	ppb	6.2904	46.18%
B 249.677†	1400.2	12.272	µg/L	2.6538	12.272	ppb	2.6538	21.63%
Ba 233.527†	23106.6	671.57	µg/L	3.810	671.57	ppb	3.810	0.57%
Be 313.107†	9557.8	5.1954	µg/L	0.07931	5.1954	ppb	0.07931	1.53%
Ca 317.933Radial†	11371.4	8954.1	µg/L	27.24	8954.1	ppb	27.24	0.30%
Cd 226.502†	427.8	0.5375	µg/L	0.47536	0.5375	ppb	0.47536	88.44%
Co 228.616†	754.5	33.627	µg/L	1.3225	33.627	ppb	1.3225	3.93%
Cr 267.716†	7326.9	170.03	µg/L	2.199	170.03	ppb	2.199	1.29%
Cu 324.752†	7272.9	69.634	µg/L	0.3720	69.634	ppb	0.3720	0.53%
Fe 238.204 Radial†	7491.6	107550	µg/L	308.3	107550	ppb	308.3	0.29%
K 766.490 Radial†	16305.6	10824	µg/L	47.7	10824	ppb	47.7	0.44%
Mg 279.077 IEC†	969.1	10446	µg/L	30.2	10446	ppb	30.2	0.29%
Mn 257.610†	681450.4	2531.3	µg/L	13.56	2531.3	ppb	13.56	0.54%
Mo 202.031†	7.5	5.0325	µg/L	0.65512	5.0325	ppb	0.65512	13.02%
Na 589.592 Radial†	5227.0	1501.0	µg/L	12.20	1501.0	ppb	12.20	0.81%

Ni 231.604†	1546.0	98.755 µg/L	2.2913	98.755 ppb	2.2913	2.32%
P 214.914†	251.0	523.22 µg/L	15.151	523.22 ppb	15.151	2.90%
Pb 220.353†	235.8	67.715 µg/L	3.1030	67.715 ppb	3.1030	4.58%
S 181.975 Axial†	57.1	327.10 µg/L	28.266	327.10 ppb	28.266	8.64%
Sb 206.836†	1.1	-1.2986 µg/L	3.01179	-1.2986 ppb	3.01179	231.93%
Se 196.026†	-256.2	4.9964 µg/L	14.26891	4.9964 ppb	14.26891	285.58%
SiO2†	378165.6	79821 µg/L	240.2	79821 ppb	240.2	0.30%
Si 251.611†	439239.1	36842 µg/L	113.4	36842 ppb	113.4	0.31%
Sn 189.927†	-60.5	-21.414 µg/L	1.5424	-21.414 ppb	1.5424	7.20%
Sr 421.552†	15779.5	100.26 µg/L	0.766	100.26 ppb	0.766	0.76%
Ti 334.940†	1540341.0	3840.9 µg/L	25.90	3840.9 ppb	25.90	0.67%
Tl 190.801†	-21.7	0.6383 µg/L	3.91648	0.6383 ppb	3.91648	613.56%
U 409.014†	-687.1	-81.061 µg/L	2.0493	-81.061 ppb	2.0493	2.53%
V 292.402†	10997.1	142.78 µg/L	1.552	142.78 ppb	1.552	1.09%
Zn 213.857†	10822.1	309.27 µg/L	2.163	309.27 ppb	2.163	0.70%

Sequence No.: 58
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 12:58:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77128.8	77128.8	100	%			12:59:27
1	Al 396.153Radial†	7700.6	7697.7	5337.6	µg/L	5337.6	ppb	12:59:27
1	Ca 317.933Radial†	7038.1	6758.3	5321.6	µg/L	5321.6	ppb	12:59:27
1	Fe 238.204 Radial†	399.8	382.3	5499.6	µg/L	5499.6	ppb	12:59:47
1	K 766.490 Radial†	8340.9	7895.5	5241.3	µg/L	5241.3	ppb	12:59:27
1	Mg 279.077 IEC†	510.2	499.9	5450.9	µg/L	5450.9	ppb	12:59:47
1	Na 589.592 Radial†	36935.8	36242.9	10408	µg/L	10408	ppb	12:59:27
1	Sr 421.552†	83434.1	82542.1	524.46	µg/L	524.46	ppb	12:59:27
1	Sc 361.383	1903443.4	1903443.4	97.944	%			13:00:51
1	Y 371.029	1198606.1	1198606.1	97.543	%			13:00:51
1	Ag 328.068†	56596.3	57839.2	543.09	µg/L	543.09	ppb	13:00:56
1	As 188.979†	238.0	242.5	558.56	µg/L	558.56	ppb	13:01:17
1	B 249.677†	10766.0	10876.7	527.16	µg/L	527.16	ppb	13:00:56
1	Ba 233.527†	18246.5	18644.0	542.65	µg/L	542.65	ppb	13:00:56
1	Be 313.107†	749877.2	761776.6	530.54	µg/L	530.54	ppb	13:00:51
1	Cd 226.502†	17777.8	18286.4	538.22	µg/L	538.22	ppb	13:00:56
1	Co 228.616†	9587.1	9833.3	542.10	µg/L	542.10	ppb	13:00:56
1	Cr 267.716†	22886.4	23449.5	544.24	µg/L	544.24	ppb	13:00:56
1	Cu 324.752†	74361.4	72253.9	544.03	µg/L	544.03	ppb	13:00:56
1	Mn 257.610†	141811.4	144977.3	536.09	µg/L	536.09	ppb	13:00:56
1	Mo 202.031†	4245.8	4317.8	542.53	µg/L	542.53	ppb	13:01:17
1	Ni 231.604†	8796.2	8645.4	544.13	µg/L	544.13	ppb	13:00:56
1	P 214.914†	1336.4	1162.0	2729.8	µg/L	2729.8	ppb	13:01:17
1	Pb 220.353†	1924.7	1909.2	556.93	µg/L	556.93	ppb	13:01:17
1	S 181.975 Axial†	212.1	191.1	1095.3	µg/L	1095.3	ppb	13:01:17
1	Sb 206.836†	516.3	504.8	561.06	µg/L	561.06	ppb	13:01:17
1	Se 196.026†	340.7	335.5	550.08	µg/L	550.08	ppb	13:01:17
1	SiO2†	29439.6	27778.8	5863.3	µg/L	5863.3	ppb	13:00:56
1	Si 251.611†	32239.8	32611.9	2735.4	µg/L	2735.4	ppb	13:00:56
1	Sn 189.927†	943.7	940.1	551.46	µg/L	551.46	ppb	13:01:17
1	Ti 334.940†	210760.5	214410.4	534.39	µg/L	534.39	ppb	13:00:51
1	Tl 190.801†	285.2	314.2	545.96	µg/L	545.96	ppb	13:01:17
1	U 409.014†	5419.9	5766.6	549.21	µg/L	549.21	ppb	13:00:56
1	V 292.402†	42762.6	43782.3	550.72	µg/L	550.72	ppb	13:00:56
1	Zn 213.857†	18840.0	18564.1	537.36	µg/L	537.36	ppb	13:00:56
2	Sc RADIAL	76827.5	76827.5	100	%			12:59:53
2	Al 396.153Radial†	7698.4	7725.5	5357.1	µg/L	5357.1	ppb	12:59:53
2	Ca 317.933Radial†	7023.4	6771.0	5331.6	µg/L	5331.6	ppb	12:59:53
2	Fe 238.204 Radial†	394.1	378.2	5441.3	µg/L	5441.3	ppb	13:00:13
2	K 766.490 Radial†	8335.0	7922.1	5259.0	µg/L	5259.0	ppb	12:59:53
2	Mg 279.077 IEC†	511.3	502.9	5484.3	µg/L	5484.3	ppb	13:00:13
2	Na 589.592 Radial†	36895.0	36346.4	10437	µg/L	10437	ppb	12:59:53
2	Sr 421.552†	83135.2	82569.1	524.64	µg/L	524.64	ppb	12:59:53
2	Sc 361.383	1925675.4	1925675.4	99.088	%			13:01:23
2	Y 371.029	1211202.7	1211202.7	98.568	%			13:01:23
2	Ag 328.068†	56498.6	57073.6	535.89	µg/L	535.89	ppb	13:01:29
2	As 188.979†	238.1	239.7	552.20	µg/L	552.20	ppb	13:01:50
2	B 249.677†	10740.1	10723.7	519.73	µg/L	519.73	ppb	13:01:29
2	Ba 233.527†	18151.2	18332.7	533.59	µg/L	533.59	ppb	13:01:29
2	Be 313.107†	752811.5	755898.8	526.44	µg/L	526.44	ppb	13:01:23
2	Cd 226.502†	17734.1	18032.8	530.75	µg/L	530.75	ppb	13:01:29
2	Co 228.616†	9575.7	9708.9	535.24	µg/L	535.24	ppb	13:01:29
2	Cr 267.716†	22878.7	23172.0	537.80	µg/L	537.80	ppb	13:01:29
2	Cu 324.752†	74301.0	71316.4	536.97	µg/L	536.97	ppb	13:01:29
2	Mn 257.610†	141371.4	142861.7	528.27	µg/L	528.27	ppb	13:01:29
2	Mo 202.031†	4231.6	4253.3	534.43	µg/L	534.43	ppb	13:01:50
2	Ni 231.604†	8770.3	8515.6	535.97	µg/L	535.97	ppb	13:01:29
2	P 214.914†	1328.0	1137.7	2672.5	µg/L	2672.5	ppb	13:01:50
2	Pb 220.353†	1913.6	1875.2	547.03	µg/L	547.03	ppb	13:01:50

2	S 181.975 Axial†	205.5	181.9	1042.7 µg/L	1042.7 ppb	13:01:50
2	Sb 206.836†	515.0	497.4	552.81 µg/L	552.81 ppb	13:01:50
2	Se 196.026†	342.3	333.1	546.05 µg/L	546.05 ppb	13:01:50
2	SiO2†	29311.0	27301.9	5762.7 µg/L	5762.7 ppb	13:01:29
2	Si 251.611†	32264.1	32256.5	2705.6 µg/L	2705.6 ppb	13:01:29
2	Sn 189.927†	952.9	938.2	550.37 µg/L	550.37 ppb	13:01:50
2	Ti 334.940†	211304.0	212474.6	529.56 µg/L	529.56 ppb	13:01:23
2	Tl 190.801†	284.6	310.3	539.11 µg/L	539.11 ppb	13:01:50
2	U 409.014†	5363.6	5645.9	537.70 µg/L	537.70 ppb	13:01:29
2	V 292.402†	42629.7	43144.1	542.70 µg/L	542.70 ppb	13:01:29
2	Zn 213.857†	18839.3	18341.4	530.91 µg/L	530.91 ppb	13:01:29
3	Sc RADIAL	77808.4	77808.4	101 %		13:00:19
3	Al 396.153Radial†	7766.3	7695.5	5337.4 µg/L	5337.4 ppb	13:00:19
3	Ca 317.933Radial†	7119.4	6777.3	5336.6 µg/L	5336.6 ppb	13:00:19
3	Fe 238.204 Radial†	387.2	366.4	5271.1 µg/L	5271.1 ppb	13:00:39
3	K 766.490 Radial†	8369.7	7851.4	5212.0 µg/L	5212.0 ppb	13:00:19
3	Mg 279.077 IEC†	498.3	483.6	5273.2 µg/L	5273.2 ppb	13:00:39
3	Na 589.592 Radial†	37250.0	36231.8	10404 µg/L	10404 ppb	13:00:19
3	Sr 421.552†	84200.3	82572.7	524.66 µg/L	524.66 ppb	13:00:19
3	Sc 361.383	1923230.2	1923230.2	98.962 %		13:01:56
3	Y 371.029	1210798.9	1210798.9	98.535 %		13:01:56
3	Ag 328.068†	55647.4	56285.9	528.40 µg/L	528.40 ppb	13:02:02
3	As 188.979†	213.2	214.8	494.87 µg/L	494.87 ppb	13:02:23
3	B 249.677†	10538.7	10534.0	510.55 µg/L	510.55 ppb	13:02:02
3	Ba 233.527†	17642.7	17842.2	519.30 µg/L	519.30 ppb	13:02:02
3	Be 313.107†	739780.3	743696.9	517.94 µg/L	517.94 ppb	13:01:56
3	Cd 226.502†	17199.5	17515.3	515.52 µg/L	515.52 ppb	13:02:02
3	Co 228.616†	9206.1	9347.6	515.27 µg/L	515.27 ppb	13:02:02
3	Cr 267.716†	21700.4	22010.7	510.85 µg/L	510.85 ppb	13:02:02
3	Cu 324.752†	71734.5	68818.4	518.17 µg/L	518.17 ppb	13:02:02
3	Mn 257.610†	136141.7	137758.6	509.40 µg/L	509.40 ppb	13:02:02
3	Mo 202.031†	3789.9	3812.5	479.05 µg/L	479.05 ppb	13:02:23
3	Ni 231.604†	8467.8	8221.1	517.43 µg/L	517.43 ppb	13:02:02
3	P 214.914†	1242.9	1053.4	2471.8 µg/L	2471.8 ppb	13:02:23
3	Pb 220.353†	1763.0	1725.5	503.27 µg/L	503.27 ppb	13:02:23
3	S 181.975 Axial†	199.6	176.2	1009.8 µg/L	1009.8 ppb	13:02:23
3	Sb 206.836†	473.8	456.4	506.87 µg/L	506.87 ppb	13:02:23
3	Se 196.026†	316.7	307.6	505.28 µg/L	505.28 ppb	13:02:23
3	SiO2†	28703.5	26725.7	5641.1 µg/L	5641.1 ppb	13:02:02
3	Si 251.611†	31386.2	31410.7	2634.6 µg/L	2634.6 ppb	13:02:02
3	Sn 189.927†	844.2	829.6	486.90 µg/L	486.90 ppb	13:02:23
3	Ti 334.940†	207244.5	208643.6	520.02 µg/L	520.02 ppb	13:01:56
3	Tl 190.801†	266.4	292.3	507.99 µg/L	507.99 ppb	13:02:23
3	U 409.014†	5048.7	5334.6	508.01 µg/L	508.01 ppb	13:02:02
3	V 292.402†	40908.1	41459.1	521.21 µg/L	521.21 ppb	13:02:02
3	Zn 213.857†	18170.0	17689.2	512.03 µg/L	512.03 ppb	13:02:02

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1917449.6	98.665	%	0.6273				0.64%
Sc RADIAL	77254.9	101	%	0.7				0.65%
Y 371.029	1206869.2	98.215	%	0.5826				0.59%
Ag 328.068†	57066.2	535.79	µg/L	7.343	535.79	ppb	7.343	1.37%
QC value within limits for Ag 328.068 Recovery = 107.16%								
Al 396.153Radial†	7706.3	5344.0	µg/L	11.33	5344.0	ppb	11.33	0.21%
QC value within limits for Al 396.153Radial Recovery = 106.88%								
As 188.979†	232.4	535.21	µg/L	35.083	535.21	ppb	35.083	6.55%
QC value within limits for As 188.979 Recovery = 107.04%								
B 249.677†	10711.5	519.14	µg/L	8.320	519.14	ppb	8.320	1.60%
QC value within limits for B 249.677 Recovery = 103.83%								
Ba 233.527†	18273.0	531.85	µg/L	11.770	531.85	ppb	11.770	2.21%
QC value within limits for Ba 233.527 Recovery = 106.37%								
Be 313.107†	753790.8	524.97	µg/L	6.423	524.97	ppb	6.423	1.22%
QC value within limits for Be 313.107 Recovery = 104.99%								
Ca 317.933Radial†	6768.9	5329.9	µg/L	7.64	5329.9	ppb	7.64	0.14%
QC value within limits for Ca 317.933Radial Recovery = 106.60%								
Cd 226.502†	17944.8	528.16	µg/L	11.568	528.16	ppb	11.568	2.19%
QC value within limits for Cd 226.502 Recovery = 105.63%								
Co 228.616†	9629.9	530.87	µg/L	13.941	530.87	ppb	13.941	2.63%

```
   QC value within limits for Co 228.616  Recovery = 106.17%
Cr 267.716†            22877.4      530.96 µg/L        17.714      530.96 ppb        17.714   3.34%
   QC value within limits for Cr 267.716  Recovery = 106.19%
Cu 324.752†            70796.3      533.06 µg/L        13.369      533.06 ppb        13.369   2.51%
   QC value within limits for Cu 324.752  Recovery = 106.61%
Fe 238.204 Radial†       375.6      5404.0 µg/L        118.74      5404.0 ppb        118.74   2.20%
   QC value within limits for Fe 238.204 Radial  Recovery = 108.08%
K 766.490 Radial†       7889.7      5237.5 µg/L         23.72      5237.5 ppb         23.72   0.45%
   QC value within limits for K 766.490 Radial  Recovery = 104.75%
Mg 279.077 IEC†          495.5      5402.8 µg/L        113.44      5402.8 ppb        113.44   2.10%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.06%
Mn 257.610†           141865.9      524.59 µg/L        13.721      524.59 ppb        13.721   2.62%
   QC value within limits for Mn 257.610  Recovery = 104.92%
Mo 202.031†            4127.8      518.67 µg/L        34.549      518.67 ppb        34.549   6.66%
   QC value within limits for Mo 202.031  Recovery = 103.73%
Na 589.592 Radial†     36273.7       10416 µg/L          18.1       10416 ppb          18.1   0.17%
   QC value within limits for Na 589.592 Radial  Recovery = 104.16%
Ni 231.604†            8460.7      532.51 µg/L        13.682      532.51 ppb        13.682   2.57%
   QC value within limits for Ni 231.604  Recovery = 106.50%
P 214.914†             1117.7      2624.7 µg/L        135.47      2624.7 ppb        135.47   5.16%
   QC value within limits for P 214.914  Recovery = 104.99%
Pb 220.353†            1836.6      535.74 µg/L        28.555      535.74 ppb        28.555   5.33%
   QC value within limits for Pb 220.353  Recovery = 107.15%
S 181.975 Axial†        183.0      1049.3 µg/L         43.12      1049.3 ppb         43.12   4.11%
   QC value within limits for S 181.975 Axial  Recovery = 104.93%
Sb 206.836†             486.2      540.25 µg/L        29.200      540.25 ppb        29.200   5.40%
   QC value within limits for Sb 206.836  Recovery = 108.05%
Se 196.026†             325.4      533.81 µg/L        24.784      533.81 ppb        24.784   4.64%
   QC value within limits for Se 196.026  Recovery = 106.76%
SiO2†                  27268.8      5755.7 µg/L        111.30      5755.7 ppb        111.30   1.93%
   QC value within limits for SiO2  Recovery = 107.63%
Si 251.611†            32093.0      2691.9 µg/L         51.76      2691.9 ppb         51.76   1.92%
   QC value within limits for Si 251.611  Recovery = 107.67%
Sn 189.927†             902.6      529.58 µg/L        36.965      529.58 ppb        36.965   6.98%
   QC value within limits for Sn 189.927  Recovery = 105.92%
Sr 421.552†            82561.3      524.59 µg/L         0.106      524.59 ppb         0.106   0.02%
   QC value within limits for Sr 421.552  Recovery = 104.92%
Ti 334.940†           211842.9      527.99 µg/L         7.311      527.99 ppb         7.311   1.38%
   QC value within limits for Ti 334.940  Recovery = 105.60%
Tl 190.801†             305.6      531.02 µg/L        20.240      531.02 ppb        20.240   3.81%
   QC value within limits for Tl 190.801  Recovery = 106.20%
U 409.014†             5582.4      531.64 µg/L        21.255      531.64 ppb        21.255   4.00%
   QC value within limits for U 409.014  Recovery = 106.33%
V 292.402†             42795.2      538.21 µg/L        15.257      538.21 ppb        15.257   2.83%
   QC value within limits for V 292.402  Recovery = 107.64%
Zn 213.857†            18198.2      526.76 µg/L        13.162      526.76 ppb        13.162   2.50%
   QC value within limits for Zn 213.857  Recovery = 105.35%
All analyte(s) passed QC.
```

Sequence No.: 59
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 13:02:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75587.5	75587.5	98.4	%			13:03:05
1	Al 396.153Radial†	-8.0	19.8	13.746	µg/L	13.746	ppb	13:03:05
1	Ca 317.933Radial†	249.7	2.1	1.6478	µg/L	1.6478	ppb	13:03:26
1	Fe 238.204 Radial†	20.1	4.5	64.753	µg/L	64.753	ppb	13:03:26
1	K 766.490 Radial†	376.0	-29.8	-19.796	µg/L	-19.796	ppb	13:03:05
1	Mg 279.077 IEC†	9.0	0.9	9.1936	µg/L	9.1936	ppb	13:03:26
1	Na 589.592 Radial†	354.6	-184.6	-53.004	µg/L	-53.004	ppb	13:03:05
1	Sr 421.552†	566.1	17.6	0.1118	µg/L	0.1118	ppb	13:03:05
1	Sc 361.383	1917740.0	1917740.0	98.680	%			13:04:28
1	Y 371.029	1210743.2	1210743.2	98.531	%			13:04:28
1	Ag 328.068†	-88.3	-34.4	-0.3156	µg/L	-0.3156	ppb	13:04:33
1	As 188.979†	-1.1	-1.7	-3.9447	µg/L	-3.9447	ppb	13:04:54
1	B 249.677†	119.9	6.3	0.2704	µg/L	0.2704	ppb	13:04:54
1	Ba 233.527†	-15.8	-1.5	-0.0432	µg/L	-0.0432	ppb	13:04:54
1	Be 313.107†	3854.1	66.2	0.0460	µg/L	0.0460	ppb	13:04:33
1	Cd 226.502†	-130.2	3.5	0.0971	µg/L	0.0971	ppb	13:04:54
1	Co 228.616†	-44.9	-0.5	-0.0308	µg/L	-0.0308	ppb	13:04:54
1	Cr 267.716†	-91.1	-9.5	-0.2201	µg/L	-0.2201	ppb	13:04:33
1	Cu 324.752†	3677.5	58.5	0.4487	µg/L	0.4487	ppb	13:04:33
1	Mn 257.610†	-140.0	47.6	0.1843	µg/L	0.1843	ppb	13:04:54
1	Mo 202.031†	15.8	-1.2	-0.1501	µg/L	-0.1501	ppb	13:04:54
1	Ni 231.604†	343.0	12.1	0.7663	µg/L	0.7663	ppb	13:04:54
1	P 214.914†	220.6	21.1	50.356	µg/L	50.356	ppb	13:04:54
1	Pb 220.353†	57.2	2.0	0.5939	µg/L	0.5939	ppb	13:04:54
1	S 181.975 Axial†	23.1	-2.1	-11.886	µg/L	-11.886	ppb	13:04:54
1	Sb 206.836†	26.8	4.7	5.2136	µg/L	5.2136	ppb	13:04:54
1	Se 196.026†	1.0	-11.4	-17.754	µg/L	-17.754	ppb	13:04:54
1	SiO2†	2256.6	8.0	1.6951	µg/L	1.6951	ppb	13:04:33
1	Si 251.611†	324.0	23.8	1.9956	µg/L	1.9956	ppb	13:04:54
1	Sn 189.927†	22.6	-0.6	-0.3163	µg/L	-0.3163	ppb	13:04:54
1	Ti 334.940†	921.4	160.1	0.3986	µg/L	0.3986	ppb	13:04:33
1	Tl 190.801†	-24.2	-1.4	-2.4976	µg/L	-2.4976	ppb	13:04:54
1	U 409.014†	-295.5	-66.5	-6.3564	µg/L	-6.3564	ppb	13:04:33
1	V 292.402†	-110.8	9.8	0.1173	µg/L	0.1173	ppb	13:04:33
1	Zn 213.857†	675.6	13.4	0.3820	µg/L	0.3820	ppb	13:04:54
2	Sc RADIAL	75419.6	75419.6	98.2	%			13:03:31
2	Al 396.153Radial†	-20.9	6.7	4.6360	µg/L	4.6360	ppb	13:03:31
2	Ca 317.933Radial†	250.8	3.8	2.9628	µg/L	2.9628	ppb	13:03:52
2	Fe 238.204 Radial†	16.0	0.4	6.1121	µg/L	6.1121	ppb	13:03:52
2	K 766.490 Radial†	368.8	-36.4	-24.138	µg/L	-24.138	ppb	13:03:31
2	Mg 279.077 IEC†	12.8	4.7	51.515	µg/L	51.515	ppb	13:03:52
2	Na 589.592 Radial†	335.4	-203.3	-58.368	µg/L	-58.368	ppb	13:03:31
2	Sr 421.552†	560.6	13.3	0.0846	µg/L	0.0846	ppb	13:03:31
2	Sc 361.383	1913276.5	1913276.5	98.450	%			13:05:00
2	Y 371.029	1207487.2	1207487.2	98.266	%			13:05:00
2	Ag 328.068†	-73.8	-19.9	-0.1832	µg/L	-0.1832	ppb	13:05:05
2	As 188.979†	1.2	0.7	1.6352	µg/L	1.6352	ppb	13:05:26
2	B 249.677†	95.8	-17.9	-0.8751	µg/L	-0.8751	ppb	13:05:26
2	Ba 233.527†	-15.8	-1.5	-0.0435	µg/L	-0.0435	ppb	13:05:26
2	Be 313.107†	3900.6	122.5	0.0852	µg/L	0.0852	ppb	13:05:05
2	Cd 226.502†	-126.2	7.3	0.2143	µg/L	0.2143	ppb	13:05:26
2	Co 228.616†	-50.0	-5.8	-0.3223	µg/L	-0.3223	ppb	13:05:26
2	Cr 267.716†	-68.6	13.1	0.3048	µg/L	0.3048	ppb	13:05:05
2	Cu 324.752†	3644.8	33.9	0.2560	µg/L	0.2560	ppb	13:05:05
2	Mn 257.610†	-141.8	45.5	0.1668	µg/L	0.1668	ppb	13:05:26
2	Mo 202.031†	11.3	-5.7	-0.7213	µg/L	-0.7213	ppb	13:05:26
2	Ni 231.604†	335.3	5.1	0.3239	µg/L	0.3239	ppb	13:05:26
2	P 214.914†	214.8	15.7	37.573	µg/L	37.573	ppb	13:05:26
2	Pb 220.353†	61.8	6.8	1.9932	µg/L	1.9932	ppb	13:05:26

2	S 181.975 Axial†	23.6	-1.5	-8.5989 µg/L	-8.5989 ppb	13:05:26
2	Sb 206.836†	28.9	6.9	7.6313 µg/L	7.6313 ppb	13:05:26
2	Se 196.026†	12.4	0.1	0.2109 µg/L	0.2109 ppb	13:05:26
2	SiO2†	2263.2	20.1	4.2365 µg/L	4.2365 ppb	13:05:05
2	Si 251.611†	330.1	30.8	2.5850 µg/L	2.5850 ppb	13:05:26
2	Sn 189.927†	25.4	2.4	1.4047 µg/L	1.4047 ppb	13:05:26
2	Ti 334.940†	914.9	155.6	0.3841 µg/L	0.3841 ppb	13:05:05
2	Tl 190.801†	-17.8	5.0	8.6683 µg/L	8.6683 ppb	13:05:26
2	U 409.014†	-252.2	-23.2	-2.2193 µg/L	-2.2193 ppb	13:05:05
2	V 292.402†	-99.2	21.4	0.2588 µg/L	0.2588 ppb	13:05:05
2	Zn 213.857†	665.2	4.3	0.1213 µg/L	0.1213 ppb	13:05:26
3	Sc RADIAL	75285.9	75285.9	98.0 %		13:03:57
3	Al 396.153Radial†	-33.1	-5.8	-4.0530 µg/L	-4.0530 ppb	13:03:57
3	Ca 317.933Radial†	244.0	-2.7	-2.1035 µg/L	-2.1035 ppb	13:04:17
3	Fe 238.204 Radial†	19.9	4.4	62.941 µg/L	62.941 ppb	13:04:17
3	K 766.490 Radial†	367.1	-37.4	-24.841 µg/L	-24.841 ppb	13:03:57
3	Mg 279.077 IEC†	11.0	2.9	31.579 µg/L	31.579 ppb	13:04:17
3	Na 589.592 Radial†	331.8	-206.3	-59.252 µg/L	-59.252 ppb	13:03:57
3	Sr 421.552†	585.4	39.7	0.2520 µg/L	0.2520 ppb	13:03:57
3	Sc 361.383	1900462.8	1900462.8	97.791 %		13:05:32
3	Y 371.029	1197737.8	1197737.8	97.472 %		13:05:32
3	Ag 328.068†	-100.9	-48.1	-0.4404 µg/L	-0.4404 ppb	13:05:37
3	As 188.979†	-2.1	-2.7	-6.2829 µg/L	-6.2829 ppb	13:05:58
3	B 249.677†	109.1	-3.6	-0.2091 µg/L	-0.2091 ppb	13:05:58
3	Ba 233.527†	-13.7	0.5	0.0148 µg/L	0.0148 ppb	13:05:58
3	Be 313.107†	3918.9	168.0	0.1170 µg/L	0.1170 ppb	13:05:37
3	Cd 226.502†	-120.4	12.3	0.3553 µg/L	0.3553 ppb	13:05:58
3	Co 228.616†	-46.3	-2.4	-0.1318 µg/L	-0.1318 ppb	13:05:58
3	Cr 267.716†	-88.0	-7.2	-0.1664 µg/L	-0.1664 ppb	13:05:37
3	Cu 324.752†	3554.4	-33.5	-0.2435 µg/L	-0.2435 ppb	13:05:37
3	Mn 257.610†	-139.5	46.9	0.1802 µg/L	0.1802 ppb	13:05:58
3	Mo 202.031†	18.8	2.0	0.2515 µg/L	0.2515 ppb	13:05:58
3	Ni 231.604†	326.5	-1.5	-0.0964 µg/L	-0.0964 ppb	13:05:58
3	P 214.914†	222.7	25.2	60.404 µg/L	60.404 ppb	13:05:58
3	Pb 220.353†	68.9	14.5	4.2238 µg/L	4.2238 ppb	13:05:58
3	S 181.975 Axial†	20.2	-4.8	-27.595 µg/L	-27.595 ppb	13:05:58
3	Sb 206.836†	22.4	0.5	0.6142 µg/L	0.6142 ppb	13:05:58
3	Se 196.026†	10.7	-1.5	-2.1473 µg/L	-2.1473 ppb	13:05:58
3	SiO2†	2293.6	66.6	14.065 µg/L	14.065 ppb	13:05:37
3	Si 251.611†	338.6	41.8	3.5031 µg/L	3.5031 ppb	13:05:58
3	Sn 189.927†	29.9	7.2	4.1950 µg/L	4.1950 ppb	13:05:58
3	Ti 334.940†	878.2	124.4	0.3077 µg/L	0.3077 ppb	13:05:37
3	Tl 190.801†	-22.4	0.2	0.3245 µg/L	0.3245 ppb	13:05:58
3	U 409.014†	-191.5	37.2	3.5397 µg/L	3.5397 ppb	13:05:37
3	V 292.402†	-76.5	43.9	0.5549 µg/L	0.5549 ppb	13:05:37
3	Zn 213.857†	668.4	12.2	0.3522 µg/L	0.3522 ppb	13:05:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1910493.1	98.307	%	0.4615				0.47%
Sc RADIAL	75431.0	98.2	%	0.20				0.20%
Y 371.029	1205322.7	98.089	%	0.5507				0.56%
Ag 328.068†	-34.1	-0.3131	µg/L	0.12862	-0.3131	ppb	0.12862	41.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	6.9	4.7764	µg/L	8.90044	4.7764	ppb	8.90044	186.34%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.2	-2.8641	µg/L	4.06810	-2.8641	ppb	4.06810	142.04%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-5.1	-0.2713	µg/L	0.57527	-0.2713	ppb	0.57527	212.08%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.8	-0.0240	µg/L	0.03358	-0.0240	ppb	0.03358	140.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	118.9	0.0827	µg/L	0.03556	0.0827	ppb	0.03556	42.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.1	0.8357	µg/L	2.62894	0.8357	ppb	2.62894	314.58%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.7	0.2222	µg/L	0.12927	0.2222	ppb	0.12927	58.17%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.9	-0.1616	µg/L	0.14799	-0.1616	ppb	0.14799	91.56%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -1.2     -0.0272 µg/L       0.28882     -0.0272 ppb        0.28882 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                19.6      0.1537 µg/L       0.35724      0.1537 ppb        0.35724 232.37%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          3.1      44.602 µg/L       33.3456      44.602 ppb        33.3456  74.76%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -34.5     -22.925 µg/L        2.7323     -22.925 ppb         2.7323  11.92%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             2.8      30.763 µg/L       21.1726      30.763 ppb        21.1726  68.83%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                46.7       0.1771 µg/L       0.00913      0.1771 ppb        0.00913   5.15%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -1.7      -0.2066 µg/L       0.48887     -0.2066 ppb        0.48887 236.57%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -198.1     -56.875 µg/L        3.3812     -56.875 ppb         3.3812   5.95%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 5.2      0.3313 µg/L       0.43137      0.3313 ppb        0.43137 130.21%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 20.7      49.444 µg/L       11.4430      49.444 ppb        11.4430  23.14%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 7.8      2.2703 µg/L       1.83074      2.2703 ppb        1.83074  80.64%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.8     -16.027 µg/L       10.1524     -16.027 ppb        10.1524  63.35%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.1      4.4864 µg/L       3.56465      4.4864 ppb        3.56465  79.46%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.3     -6.5636 µg/L       9.76293     -6.5636 ppb        9.76293 148.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      31.6      6.6654 µg/L       6.53260      6.6654 ppb        6.53260  98.01%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                32.1      2.6946 µg/L       0.75967      2.6946 ppb        0.75967  28.19%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.0      1.7612 µg/L       2.27668      1.7612 ppb        2.27668 129.27%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                23.5      0.1495 µg/L       0.08983      0.1495 ppb        0.08983  60.09%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               146.7      0.3635 µg/L       0.04884      0.3635 ppb        0.04884  13.44%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.3      2.1650 µg/L       5.80602      2.1650 ppb        5.80602 268.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -17.5     -1.6787 µg/L       4.97013     -1.6787 ppb        4.97013 296.08%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 25.0      0.3104 µg/L       0.22329      0.3104 ppb        0.22329  71.95%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                10.0      0.2852 µg/L       0.14271      0.2852 ppb        0.14271  50.05%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, January 19, 2010 10:27:14
Sample Description:
Method File: C:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\090811\Sample.360
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	546.6	546.610	23.267	4.3
	Mg	24.0	9377.1	9377.078	190.116	2.0
	Co	58.9	23678.6	23678.614	492.218	2.1
	Rh	102.9	42948.3	42948.266	360.876	0.8
	In	114.9	59859.2	59859.153	457.899	0.8
	Pb	208.0	25889.6	25889.640	215.692	0.8
⌈>	Ba	137.9	50948.0	50947.986	561.860	1.1
⌊	Ba++	69.0	832.1	0.016	0.000	1.7
⌈>	Ce	139.9	59643.1	59643.051	427.722	0.7
⌊	CeO	155.9	1287.4	0.022	0.000	1.6
	Bkgd	220.0	6.0	6.000	1.118	18.6

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
9.00	Lens Voltage
1000.00	ICP RF Power
-1875.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	8.5	443.3
Co	59	13	9.0	16302.6
In	115	13	10.3	44200.9

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	603	2060	0.699
Be	9.0	8.9	2034	2045	0.710
Mg	24.0	23.9	5665	2075	0.710
Mg	25.0	25.0	5927	2080	0.666
Mg	26.0	25.9	6169	2085	0.735
Co	58.9	58.9	14168	2140	0.683
Rh	102.9	102.8	24854	2230	0.686
In	114.9	114.8	27766	2255	0.698
Ce	139.9	139.9	33852	2310	0.666
Pb	206.0	206.0	49938	2500	0.676
Pb	207.0	207.0	50101	2380	0.639
Pb	208.0	208.0	50448	2570	0.635
U	238.1	238.1	57708	2510	0.671

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, January 19, 2010 20:12:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\Blank.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		58273	
	Tl	205		ug/L		53	
	U	238		ug/L		129	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175					
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, January 19, 2010 20:15:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\Standard 1.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		58142	58141.676
	Tl	205	10.000	ug/L	0.863	8239	0.141
	U	238	10.000	ug/L	0.598	54152	0.929

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175					
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, January 19, 2010 20:19:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\Standard 2.171

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		58550	58550.364
	Tl	205	100.002	ug/L	2.080	82654	1.411
	U	238	99.985	ug/L	1.640	536160	9.157

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175					
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, January 19, 2010 20:23:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 1.172

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		59094	59093.562
|	Tl	205	**48.327**	ug/L	1.586	40345	0.682
[	U	238	**52.480**	ug/L	0.852	284140	4.806

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		101.4			
|	Tl	205	96.654				
[	U	238	104.960				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, January 19, 2010 20:26:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 2.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		59089	59088.543
|	Tl	205	0.076	ug/L	18.909	117	0.001
⌊	U	238	0.007	ug/L	36.105	168	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		101.4			
|	Tl	205					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, January 19, 2010 20:30:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 3.174

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		59616	59615.730
	Tl	205	**1.063**	ug/L	3.913	949	0.015
	U	238	**0.241**	ug/L	3.718	1448	0.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		102.3			
	Tl	205	106.341				
	U	238	120.506				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, January 19, 2010 20:33:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 4.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		59096	59095.579
	Tl	205	0.006	ug/L	106.463	59	0.000
	U	238	-0.018	ug/L	4.826	32	-0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		101.4			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, January 19, 2010 20:37:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 5.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		57084	57084.071
|	Tl	205	**17.699**	ug/L	1.362	14307	0.250
⌊	U	238	**20.579**	ug/L	1.474	107699	1.885

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175			98.0		
|	Tl	205	88.497				
⌊	U	238	102.896				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, January 19, 2010 20:41:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 6.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		59947	59946.804
|	Tl	205	**48.187**	ug/L	0.798	40809	0.680
⌊	U	238	**51.963**	ug/L	1.192	285380	4.759

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		102.9			
|	Tl	205	96.374				
⌊	U	238	103.926				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, January 19, 2010 20:44:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 7.178

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Lu	175		ug/L		60029	60029.460
Tl	205	**0.097**	ug/L	10.500	137	0.001
U	238	**0.002**	ug/L	89.460	144	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Lu	175		103.0			
Tl	205					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011806
Sample Date/Time: Tuesday, January 19, 2010 20:48:40
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\1202011806.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		59249	59249.204
	Tl	205	0.054	ug/L	5.377	99	0.001
	U	238	-0.004	ug/L	49.719	112	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		101.7			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011807
Sample Date/Time: Tuesday, January 19, 2010 20:52:23
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 940132|40|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\1202011807.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		60314	60314.324
|	Tl	205	32.778	ug/L	1.301	27949	0.462
⌊	U	238	0.498	ug/L	0.386	2884	0.046

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		103.5			
|	Tl	205					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227001
Sample Date/Time: Tuesday, January 19, 2010 20:56:06
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227001.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		63570	63570.124
	Tl	205	0.438	ug/L	3.692	451	0.006
	U	238	2.505	ug/L	1.857	14727	0.229

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		109.1			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011808
Sample Date/Time: Tuesday, January 19, 2010 20:59:49
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\1202011808.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		61916	61915.512
	Tl	205	0.176	ug/L	7.097	210	0.002
	U	238	1.562	ug/L	1.408	8993	0.143

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		106.3			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, January 19, 2010 21:03:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 6.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		59429	59429.292
	Tl	205	49.003	ug/L	0.560	41142	0.691
	U	238	52.060	ug/L	0.730	283465	4.768

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		102.0			
	Tl	205	98.006				
	U	238	104.119				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, January 19, 2010 21:07:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 7.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		60388	60388.307
|	Tl	205	**0.100**	ug/L	10.684	141	0.001
⌊	U	238	**0.003**	ug/L	47.692	150	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		103.6			
|	Tl	205					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011809
Sample Date/Time: Tuesday, January 19, 2010 21:10:55
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\1202011809.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		62510	62509.755
	Tl	205	**48.335**	ug/L	1.090	42687	0.682
	U	238	**27.829**	ug/L	0.736	159455	2.549

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		107.3			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011811
Sample Date/Time: Tuesday, January 19, 2010 21:14:40
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\1202011811.186

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Lu	175		ug/L		62763	62763.203
Tl	205	49.684	ug/L	0.790	44052	0.701
U	238	28.230	ug/L	0.851	162400	2.585

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Lu	175		107.7			
Tl	205					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202011810
Sample Date/Time: Tuesday, January 19, 2010 21:18:25
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 940132|10|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\1202011810.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		61500	61500.047
	Tl	205	0.306	ug/L	12.242	322	0.004
	U	238	0.508	ug/L	0.714	2996	0.047

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		105.5			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227002
Sample Date/Time: Tuesday, January 19, 2010 21:22:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227002.188

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		61867	61866.634
|	Tl	205	0.340	ug/L	4.388	354	0.005
⌊	U	238	17.769	ug/L	0.463	100811	1.627

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		106.2			
|	Tl	205					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, January 19, 2010 21:25:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 6.189

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		61114	61114.057
	Tl	205	49.344	ug/L	1.108	42602	0.696
	U	238	52.516	ug/L	0.789	294055	4.809

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		104.9			
	Tl	205	98.689				
	U	238	105.031				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, January 19, 2010 21:29:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 7.190

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		60074	60073.685
	Tl	205	0.104	ug/L	4.447	143	0.001
	U	238	0.004	ug/L	79.717	155	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		103.1			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227003
Sample Date/Time: Tuesday, January 19, 2010 21:33:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227003.191

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		63051	63051.476
	Tl	205	**0.268**	ug/L	7.492	296	0.004
[	U	238	**4.019**	ug/L	1.155	23351	0.368

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		108.2			
	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227004
Sample Date/Time: Tuesday, January 19, 2010 21:36:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227004.192

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		63227	63227.250
	Tl	205	0.341	ug/L	7.125	362	0.005
	U	238	1.798	ug/L	1.544	10550	0.165

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		108.5			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227005
Sample Date/Time: Tuesday, January 19, 2010 21:40:41
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227005.193

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		62266	62265.690
	Tl	205	0.673	ug/L	1.273	648	0.009
	U	238	13.216	ug/L	2.295	75499	1.210

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		106.9			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227006
Sample Date/Time: Tuesday, January 19, 2010 21:44:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227006.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		62921	62921.237
	Tl	205	0.307	ug/L	3.657	330	0.004
	U	238	12.680	ug/L	1.370	73202	1.161

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		108.0			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, January 19, 2010 21:48:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 6.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		59919	59918.998
	Tl	205	49.694	ug/L	0.582	42066	0.701
	U	238	52.140	ug/L	0.923	286250	4.775

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		102.8			
	Tl	205	99.387				
	U	238	104.279				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, January 19, 2010 21:51:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 7.196

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Lu	175		ug/L		61009	61009.277
Tl	205	**0.085**	ug/L	10.805	129	0.001
U	238	**0.002**	ug/L	100.230	146	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Lu	175			104.7		
Tl	205					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227007
Sample Date/Time: Tuesday, January 19, 2010 21:55:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227007.197

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		63214	63213.520
|	Tl	205	0.135	ug/L	3.602	178	0.002
⌊	U	238	1.990	ug/L	0.943	11658	0.182

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		108.5			
|	Tl	205					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227008
Sample Date/Time: Tuesday, January 19, 2010 21:59:18
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227008.198

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		62325	62324.949
	Tl	205	**0.502**	ug/L	5.419	498	0.007
	U	238	**31.801**	ug/L	0.134	181654	2.912

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		107.0			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227009
Sample Date/Time: Tuesday, January 19, 2010 22:03:03
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227009.199

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		62624	62623.929
|	Tl	205	0.585	ug/L	2.637	574	0.008
⌊	U	238	20.584	ug/L	0.831	118187	1.885

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		107.5			
|	Tl	205					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227010
Sample Date/Time: Tuesday, January 19, 2010 22:06:46
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227010.200

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		62548	62548.257
|	Tl	205	0.317	ug/L	1.049	337	0.004
⌊	U	238	12.996	ug/L	0.838	74583	1.190

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		107.3			
|	Tl	205					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, January 19, 2010 22:10:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 6.201

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		59995	59995.330
	Tl	205	49.320	ug/L	1.706	41798	0.696
	U	238	52.090	ug/L	1.716	286303	4.771

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175			103.0		
	Tl	205	98.639				
	U	238	104.180				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, January 19, 2010 22:14:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 7.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		60838	60837.547
|	Tl	205	0.086	ug/L	10.363	130	0.001
⌊	U	238	0.004	ug/L	114.467	155	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		104.4			
|	Tl	205					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227011
Sample Date/Time: Tuesday, January 19, 2010 22:17:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227011.203

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		**ug/L**		60743	60743.167
	Tl	205	**0.192**	**ug/L**	12.206	220	0.003
	U	238	**5.945**	**ug/L**	1.474	33205	0.544

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		104.2			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227012
Sample Date/Time: Tuesday, January 19, 2010 22:21:37
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227012.204

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		62117	62117.046
	Tl	205	**0.731**	ug/L	3.595	698	0.010
	U	238	**4.226**	ug/L	0.672	24180	0.387

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		106.6			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227013
Sample Date/Time: Tuesday, January 19, 2010 22:25:22
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227013.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		63411	63411.062
	Tl	205	**0.699**	ug/L	5.929	684	0.010
	U	238	**2.767**	ug/L	0.367	16210	0.253

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		108.8			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227014
Sample Date/Time: Tuesday, January 19, 2010 22:29:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227014.206

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		64853	64853.198
|	Tl	205	0.323	ug/L	7.877	355	0.005
⌊	U	238	2.231	ug/L	0.922	13394	0.204

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		111.3			
|	Tl	205					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 244227015
Sample Date/Time: Tuesday, January 19, 2010 22:32:54
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|skj
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\244227015.207

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		63363	63362.508
	Tl	205	0.547	ug/L	3.377	547	0.008
	U	238	3.016	ug/L	0.405	17640	0.276

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		108.7			
	Tl	205					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, January 19, 2010 22:36:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 6.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		60578	60578.115
	Tl	205	49.475	ug/L	0.313	42341	0.698
	U	238	51.849	ug/L	0.398	287793	4.748

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		104.0			
	Tl	205	98.951				
	U	238	103.698				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, January 19, 2010 22:40:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\tl and u only.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 7.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		61701	61700.607
|	Tl	205	0.093	ug/L	23.617	137	0.001
⌊	U	238	0.002	ug/L	46.754	149	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		105.9			
|	Tl	205					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, January 15, 2010 14:03:18
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default2\Sample.1706
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	2157.6	2157.563	49.234	2.3
	Mg	24.0	28864.9	28864.948	759.726	2.6
	Co	58.9	71819.5	71819.505	971.993	1.4
	Rh	102.9	127036.8	127036.764	908.068	0.7
	In	114.9	187892.8	187892.798	1223.128	0.7
	Pb	208.0	199840.7	199840.738	1663.440	0.8
⌈>	Ba	137.9	180917.0	180917.033	2099.094	1.2
⌊	Ba++	69.0	2602.3	0.014	0.000	1.2
⌈>	Ce	139.9	220550.0	220549.967	2162.101	1.0
⌊	CeO	155.9	4850.5	0.022	0.000	1.7
	Bkgd	220.0	17.4	17.400	0.962	5.5

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
8.75	Lens Voltage
1450.00	ICP RF Power
-1718.75	Analog Stage Voltage
1200.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	19	8.5	4176.9
Co	59	19	9.5	71123.6
In	115	19	11.0	184619.6

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	595	2050	0.643
Be	9.0	9.0	2050	2070	0.622
Mg	24.0	24.0	5683	2070	0.610
Mg	25.0	25.0	5947	2070	0.597
Mg	26.0	26.0	6193	2070	0.623
Co	58.9	58.9	14188	2105	0.608
Rh	102.9	102.9	24872	2165	0.606
In	114.9	114.9	27798	2185	0.600
Ce	139.9	139.9	33870	2200	0.619
Pb	206.0	206.0	49948	2270	0.666
Pb	207.0	207.0	50159	2235	0.633
Pb	208.0	207.9	50451	2260	0.685
U	238.1	238.1	57734	2275	0.695

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Friday, January 15, 2010 21:40:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\Blank.271

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		53	
	Be	9		ug/L		18	
	B	11		ug/L		303	
	Na	23		ug/L		22017	
	Mg	24		ug/L		6669	
	Al	27		ug/L		8003	
	P	31		ug/L		6385	
	K	39		ug/L		515125	
	Ca	43		ug/L		253	
>	Sc	45		ug/L		788794	
	Ti	47		ug/L		289	
	V	51		ug/L		3597	
	Cr	52		ug/L		-1405	
	Cr	53		ug/L		73706	
	Mn	55		ug/L		1474	
	Fe	57		ug/L		4625	
	Co	59		ug/L		182	
	Ni	60		ug/L		138	
	Cu	63		ug/L		231	
	Cu	65		ug/L		148	
	Zn	66		ug/L		189	
	Zn	67		ug/L		7222	
	Zn	68		ug/L		789	
>	Ge	74		ug/L		299192	
	As	75		ug/L		-105	
	Se	77		ug/L		4287	
	Se	82		ug/L		-4	
	Kr	83		ug/L		85	
	Sr	88		ug/L		216	
	Y	89		ug/L		50	
	Mo	98		ug/L		105	
	Ag	107		ug/L		57	
	Cd	111		ug/L		24	
	Cd	114		ug/L		49	
>	In	115		ug/L		209135	
	Sn	120		ug/L		254	
	Sb	121		ug/L		488	
	Sb	123		ug/L		384	
	Ba	135		ug/L		49	
	Ba	137		ug/L		63	
	Ho	165		ug/L		18	
>	Lu	175		ug/L		451906	
	Tl	205		ug/L		1578	
	Pb	208		ug/L		701	
	Bi	209		ug/L		156	
	Th	232		ug/L		1231	
	U	238		ug/L		830	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Friday, January 15, 2010 21:46:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\Standard 1.272

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.669	10070	0.013
	Be	9	10.000	ug/L	2.598	3352	0.004
	B	11	20.000	ug/L	5.460	7172	0.009
	Na	23	1000.000	ug/L	12.983	3830593	4.774
	Mg	24	1000.000	ug/L	6.347	2813258	3.515
	Al	27	1000.000	ug/L	2.676	3902639	4.874
	P	31	1000.000	ug/L	2.845	216889	0.263
	K	39	1000.000	ug/L	3.670	5165870	5.812
	Ca	43	1000.000	ug/L	1.720	11094	0.014
>	Sc	45		ug/L		799233	799232.644
	Ti	47	10.000	ug/L	1.088	5049	0.006
	V	51	10.000	ug/L	10.506	58275	0.068
	Cr	52	10.000	ug/L	2.849	42748	0.055
	Cr	53		ug/L		82973	0.010
	Mn	55	10.000	ug/L	3.093	77901	0.096
	Fe	57	1000.000	ug/L	4.475	161410	0.196
	Co	59	10.000	ug/L	3.293	58054	0.072
	Ni	60	10.000	ug/L	1.092	12320	0.015
	Cu	63		ug/L		29458	0.037
	Cu	65	10.000	ug/L	2.496	13765	0.017
	Zn	66	10.000	ug/L	1.594	9313	0.030
	Zn	67		ug/L		8958	0.005
	Zn	68		ug/L		7151	0.021
>	Ge	74		ug/L		303552	303551.825
	As	75	10.000	ug/L	3.070	8577	0.029
	Se	77		ug/L		5176	0.003
	Se	82	10.000	ug/L	2.711	837	0.003
	Kr	83		ug/L		94	0.000
	Sr	88	10.000	ug/L	0.693	104417	0.495
	Y	89		ug/L		56	0.000
	Mo	98	10.000	ug/L	1.283	24994	0.118
	Ag	107	10.000	ug/L	1.674	45725	0.217
	Cd	111	10.000	ug/L	0.388	11597	0.055
	Cd	114		ug/L		29058	0.138
>	In	115		ug/L		210724	210724.329
	Sn	120	10.000	ug/L	2.185	53881	0.255
	Sb	121	10.000	ug/L	1.560	45472	0.213
	Sb	123		ug/L		36024	0.169
	Ba	135		ug/L		13154	0.029
	Ba	137	10.000	ug/L	1.674	23120	0.051
	Ho	165		ug/L		24	0.000
>	Lu	175		ug/L		451026	451026.078
	Tl	205	10.000	ug/L	1.469	223689	0.493
	Pb	208	10.000	ug/L	1.184	336585	0.745
	Bi	209		ug/L		189	0.000
	Th	232	10.000	ug/L	0.700	441014	0.975
	U	238	10.000	ug/L	3.403	471078	1.043

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Friday, January 15, 2010 21:52:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\Standard 2.273

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.988**	**ug/L**	5.446	99930	0.124
	Be	9	**99.945**	**ug/L**	3.346	31921	0.040
	B	11	**199.927**	**ug/L**	2.976	67208	0.083
	Na	23	**10005.619**	**ug/L**	0.693	40859659	50.613
	Mg	24	**10002.505**	**ug/L**	0.061	29100471	36.058
	Al	27	**9996.707**	**ug/L**	5.663	38070188	47.173
	P	31	**9989.820**	**ug/L**	1.756	1933299	2.388
	K	39	**10007.526**	**ug/L**	4.552	51274811	62.895
	Ca	43	**9999.154**	**ug/L**	2.364	108762	0.134
>	Sc	45		**ug/L**		806853	806853.154
	Ti	47	**100.024**	**ug/L**	2.336	49506	0.061
	V	51	**100.007**	**ug/L**	1.936	560065	0.690
	Cr	52	**99.966**	**ug/L**	0.671	429703	0.534
	Cr	53		**ug/L**		121998	0.058
	Mn	55	**99.953**	**ug/L**	1.363	738398	0.913
	Fe	57	**9988.866**	**ug/L**	0.716	1427753	1.764
	Co	59	**99.949**	**ug/L**	1.004	555943	0.689
	Ni	60	**99.963**	**ug/L**	1.023	118672	0.147
	Cu	63		**ug/L**		282238	0.350
	Cu	65	**99.992**	**ug/L**	0.445	136528	0.169
	Zn	66	**99.990**	**ug/L**	2.847	91644	0.297
	Zn	67		**ug/L**		20728	0.043
	Zn	68		**ug/L**		64619	0.208
>	Ge	74		**ug/L**		307555	307555.081
	As	75	**100.002**	**ug/L**	3.190	88043	0.287
	Se	77		**ug/L**		10786	0.021
	Se	82	**100.025**	**ug/L**	2.438	8740	0.028
	Kr	83		**ug/L**		95	0.000
	Sr	88	**99.969**	**ug/L**	1.244	1003309	4.797
	Y	89		**ug/L**		137	0.000
	Mo	98	**100.004**	**ug/L**	1.823	248145	1.186
	Ag	107	**99.966**	**ug/L**	2.349	437947	2.094
	Cd	111	**99.998**	**ug/L**	1.714	114675	0.548
	Cd	114		**ug/L**		282005	1.349
>	In	115		**ug/L**		209110	209110.498
	Sn	120	**99.976**	**ug/L**	0.999	519699	2.484
	Sb	121	**99.982**	**ug/L**	2.356	438786	2.096
	Sb	123		**ug/L**		345368	1.650
	Ba	135		**ug/L**		130205	0.287
	Ba	137	**99.985**	**ug/L**	0.275	228659	0.504
	Ho	165		**ug/L**		27	0.000
>	Lu	175		**ug/L**		453983	453982.752
	Tl	205	**99.801**	**ug/L**	0.875	1862980	4.100
	Pb	208	**99.881**	**ug/L**	1.474	3018504	6.648
	Bi	209		**ug/L**		444	0.001
	Th	232	**99.818**	**ug/L**	2.034	3739230	8.234
	U	238	**99.846**	**ug/L**	2.535	4096226	9.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Friday, January 15, 2010 21:58:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 1.274

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**52.034**	**ug/L**	6.623	52486	0.064
|	Be	9	**52.683**	**ug/L**	4.188	16983	0.021
|	B	11	**104.851**	**ug/L**	2.988	35710	0.043
|	Na	23	**4960.124**	**ug/L**	2.343	20449030	25.091
|	Mg	24	**4911.830**	**ug/L**	3.127	14422602	17.707
|	Al	27	**5078.843**	**ug/L**	6.156	19524314	23.966
|	P	31	**5186.895**	**ug/L**	1.026	1015901	1.240
|	K	39	**4836.397**	**ug/L**	6.022	25281331	30.396
|	Ca	43	**4995.073**	**ug/L**	1.460	54945	0.067
|>	Sc	45		**ug/L**		814072	814072.209
|	Ti	47	**49.599**	**ug/L**	0.624	24920	0.030
|	V	51	**50.993**	**ug/L**	2.461	289939	0.352
|	Cr	52	**51.411**	**ug/L**	0.851	222255	0.275
|	Cr	53		**ug/L**		100861	0.030
|	Mn	55	**51.673**	**ug/L**	1.411	385857	0.472
|	Fe	57	**5177.704**	**ug/L**	0.487	748985	0.914
|	Co	59	**50.371**	**ug/L**	0.411	282779	0.347
|	Ni	60	**52.490**	**ug/L**	2.500	62931	0.077
|	Cu	63		**ug/L**		146382	0.180
⌊	Cu	65	**50.895**	**ug/L**	0.561	70189	0.086
⌈	Zn	66	**52.332**	**ug/L**	0.557	47618	0.156
|	Zn	67		**ug/L**		14367	0.023
|	Zn	68		**ug/L**		33573	0.108
|>	Ge	74		**ug/L**		304644	304643.568
|	As	75	**49.853**	**ug/L**	1.642	43435	0.143
|	Se	77		**ug/L**		8008	0.012
|	Se	82	**50.692**	**ug/L**	0.883	4386	0.014
⌊	Kr	83		**ug/L**		79	-0.000
⌈	Sr	88	**53.408**	**ug/L**	0.223	533809	2.563
|	Y	89		**ug/L**		74	0.000
|	Mo	98	**50.169**	**ug/L**	2.925	123993	0.595
|	Ag	107	**51.864**	**ug/L**	1.522	226282	1.087
|	Cd	111	**51.524**	**ug/L**	1.757	58844	0.283
|	Cd	114		**ug/L**		144714	0.695
|>	In	115		**ug/L**		208210	208210.053
|	Sn	120	**51.724**	**ug/L**	2.235	267814	1.285
|	Sb	121	**52.534**	**ug/L**	1.485	229809	1.102
⌊	Sb	123		**ug/L**		182422	0.874
⌈	Ba	135		**ug/L**		66658	0.145
|	Ba	137	**50.273**	**ug/L**	2.234	116681	0.253
|	Ho	165		**ug/L**		49	0.000
|>	Lu	175		**ug/L**		460638	460637.823
|	Tl	205	**52.852**	**ug/L**	1.607	1001767	2.171
|	Pb	208	**53.304**	**ug/L**	1.000	1634878	3.548
|	Bi	209		**ug/L**		470	0.001
|	Th	232	**51.257**	**ug/L**	1.525	1948897	4.228
⌊	U	238	**52.404**	**ug/L**	2.195	2181938	4.735

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	104.069				
	Be	9	105.366				
	B	11	104.851				
	Na	23	99.202				
	Mg	24	98.237				
	Al	27	100.571				
	P	31	103.738				
	K	39	96.728				
	Ca	43	99.901				
>	Sc	45		103.2			
	Ti	47	99.198				
	V	51	101.985				
	Cr	52	102.823				
	Cr	53					
	Mn	55	103.347				
	Fe	57	103.554				
	Co	59	100.742				
	Ni	60	104.980				
	Cu	63					
	Cu	65	101.790				
	Zn	66	104.663				
	Zn	67					
	Zn	68					
>	Ge	74		101.8			
	As	75	99.706				
	Se	77					
	Se	82	101.384				
	Kr	83					
	Sr	88	106.816				
	Y	89					
	Mo	98	100.338				
	Ag	107	103.728				
	Cd	111	103.048				
	Cd	114					
>	In	115		99.6			
	Sn	120	103.447				
	Sb	121	105.068				
	Sb	123					
	Ba	135					
	Ba	137	100.545				
	Ho	165					
>	Lu	175		101.9			
	Tl	205	105.704				
	Pb	208	106.608				
	Bi	209					
	Th	232	102.514				
	U	238	104.809				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Friday, January 15, 2010 22:05:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 2.275

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.004	ug/L	147.492	58	0.000
	Be	9	-0.006	ug/L	156.614	16	-0.000
	B	11	3.863	ug/L	25.342	1588	0.002
	Na	23	-1.574	ug/L	53.160	16009	-0.008
	Mg	24	-0.040	ug/L	981.606	6668	-0.000
	Al	27	0.061	ug/L	1394.887	8336	0.000
	P	31	-1.464	ug/L	89.703	6215	-0.000
	K	39	-1.680	ug/L	312.320	515133	-0.011
	Ca	43	-2.442	ug/L	69.346	231	-0.000
>	Sc	45		ug/L		802276	802275.691
	Ti	47	-0.094	ug/L	26.386	249	-0.000
	V	51	-0.023	ug/L	703.133	3538	-0.000
	Cr	52	0.084	ug/L	26.817	-1069	0.000
	Cr	53		ug/L		74415	-0.001
	Mn	55	-0.034	ug/L	12.616	1253	-0.000
	Fe	57	-0.681	ug/L	73.117	4607	-0.000
	Co	59	0.003	ug/L	56.320	204	0.000
	Ni	60	0.000	ug/L	6085.108	140	0.000
	Cu	63		ug/L		225	-0.000
	Cu	65	-0.015	ug/L	10.567	131	-0.000
	Zn	66	0.003	ug/L	628.294	192	0.000
	Zn	67		ug/L		7166	-0.000
	Zn	68		ug/L		781	-0.000
>	Ge	74		ug/L		299809	299808.614
	As	75	-0.167	ug/L	230.517	-249	-0.000
	Se	77		ug/L		4587	0.001
	Se	82	0.118	ug/L	125.911	6	0.000
	Kr	83		ug/L		80	-0.000
	Sr	88	0.002	ug/L	111.591	231	0.000
	Y	89		ug/L		41	-0.000
	Mo	98	0.024	ug/L	28.598	163	0.000
	Ag	107	0.001	ug/L	33.640	60	0.000
	Cd	111	0.012	ug/L	62.450	38	0.000
	Cd	114		ug/L		52	0.000
>	In	115		ug/L		207803	207802.906
	Sn	120	0.077	ug/L	23.901	650	0.002
	Sb	121	0.504	ug/L	21.010	2682	0.011
	Sb	123		ug/L		2127	0.008
	Ba	135		ug/L		47	-0.000
	Ba	137	0.003	ug/L	86.158	71	0.000
	Ho	165		ug/L		21	0.000
>	Lu	175		ug/L		451879	451878.780
	Tl	205	0.244	ug/L	24.606	6095	0.010
	Pb	208	0.001	ug/L	63.371	738	0.000
	Bi	209		ug/L		177	0.000
	Th	232	0.056	ug/L	30.276	3305	0.005
	U	238	0.005	ug/L	22.779	1035	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Friday, January 15, 2010 22:11:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 3.276

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.606**	ug/L	6.043	11396	0.014
	Be	9	**0.581**	ug/L	4.728	199	0.000
	B	11	**17.617**	ug/L	1.464	6072	0.007
	Na	23	**250.777**	ug/L	5.893	1023849	1.269
	Mg	24	**11.745**	ug/L	22.757	40057	0.042
	Al	27	**30.811**	ug/L	12.720	122865	0.145
	P	31	**56.870**	ug/L	4.444	17125	0.014
	K	39	**301.470**	ug/L	5.193	2011363	1.895
	Ca	43	**226.459**	ug/L	3.607	2658	0.003
>	Sc	45		ug/L		789475	789474.964
	Ti	47	**9.249**	ug/L	1.557	4742	0.006
	V	51	**11.091**	ug/L	2.693	63985	0.076
	Cr	52	**10.959**	ug/L	0.324	44841	0.059
	Cr	53		ug/L		83882	0.013
	Mn	55	**5.893**	ug/L	1.510	43991	0.054
	Fe	57	**119.065**	ug/L	1.480	21225	0.021
	Co	59	**1.128**	ug/L	0.718	6320	0.008
	Ni	60	**2.204**	ug/L	3.429	2694	0.003
	Cu	63		ug/L		3448	0.004
	Cu	65	**1.090**	ug/L	4.370	1602	0.002
	Zn	66	**11.084**	ug/L	1.898	9960	0.033
	Zn	67		ug/L		9023	0.006
	Zn	68		ug/L		7523	0.023
>	Ge	74		ug/L		296433	296432.824
	As	75	**5.725**	ug/L	5.608	4762	0.016
	Se	77		ug/L		5235	0.003
	Se	82	**5.647**	ug/L	8.933	471	0.002
	Kr	83		ug/L		80	-0.000
	Sr	88	**11.672**	ug/L	2.737	116184	0.560
	Y	89		ug/L		41	-0.000
	Mo	98	**0.558**	ug/L	5.711	1473	0.007
	Ag	107	**1.040**	ug/L	3.563	4566	0.022
	Cd	111	**1.100**	ug/L	3.431	1274	0.006
	Cd	114		ug/L		3116	0.015
>	In	115		ug/L		207144	207144.215
	Sn	120	**5.717**	ug/L	3.451	29662	0.142
	Sb	121	**3.493**	ug/L	3.277	15645	0.073
	Sb	123		ug/L		12450	0.058
	Ba	135		ug/L		2741	0.006
	Ba	137	**2.244**	ug/L	2.583	5127	0.011
	Ho	165		ug/L		23	0.000
>	Lu	175		ug/L		448202	448202.460
	Tl	205	**1.313**	ug/L	2.992	25732	0.054
	Pb	208	**2.424**	ug/L	1.487	73009	0.161
	Bi	209		ug/L		188	0.000
	Th	232	**1.324**	ug/L	1.677	50177	0.109
	U	238	**0.261**	ug/L	1.470	11383	0.024

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	116.057				
	Be	9	116.142				
	B	11	117.443				
	Na	23	100.311				
	Mg	24	78.303				
	Al	27	102.703				
	P	31	113.740				
	K	39	100.490				
	Ca	43	113.230				
>	Sc	45		100.1			
	Ti	47	92.495				
	V	51	110.911				
	Cr	52	109.589				
	Cr	53					
	Mn	55	117.869				
	Fe	57	119.065				
	Co	59	112.824				
	Ni	60	110.181				
	Cu	63					
	Cu	65	108.956				
	Zn	66	110.838				
	Zn	67					
	Zn	68					
>	Ge	74		99.1			
	As	75	114.492				
	Se	77					
	Se	82	112.940				
	Kr	83					
	Sr	88	116.719				
	Y	89					
	Mo	98	111.522				
	Ag	107	103.962				
	Cd	111	110.021				
	Cd	114					
>	In	115		99.0			
	Sn	120	114.340				
	Sb	121	116.419				
	Sb	123					
	Ba	135					
	Ba	137	112.193				
	Ho	165					
>	Lu	175		99.2			
	Tl	205	131.258				
	Pb	208	121.220				
	Bi	209					
	Th	232	132.424				
	U	238	130.389				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Tl	205	CRDL is out of limits
QC Std 3	Th	232	CRDL is out of limits
QC Std 3	U	238	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Friday, January 15, 2010 22:17:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 4.277

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.123**	ug/L	9.604	173	0.000
	Be	9	**0.064**	ug/L	30.706	38	0.000
	B	11	**1.343**	ug/L	4.845	744	0.001
	Na	23	**95070.484**	ug/L	15.538	379871943	480.910
	Mg	24	**95206.100**	ug/L	2.800	271264037	343.210
	Al	27	**95835.506**	ug/L	4.279	357397235	452.237
	P	31	**96808.038**	ug/L	1.626	18296005	23.141
	K	39	**91317.948**	ug/L	2.908	454173763	573.916
	Ca	43	**92683.923**	ug/L	1.973	985433	1.246
>	Sc	45		ug/L		790413	790413.243
	Ti	47	**1415.901**	ug/L	1.532	682708	0.863
	V	51	**0.289**	ug/L	54.108	5176	0.002
	Cr	52	**2.840**	ug/L	2.452	10589	0.015
	Cr	53		ug/L		56548	-0.022
	Mn	55	**5.692**	ug/L	0.856	42585	0.052
	Fe	57	**91562.366**	ug/L	1.501	12781858	16.167
	Co	59	**0.270**	ug/L	5.213	1652	0.002
	Ni	60	**2.737**	ug/L	1.754	3317	0.004
	Cu	63		ug/L		5258	0.006
	Cu	65	**2.657**	ug/L	2.539	3698	0.004
	Zn	66	**3.487**	ug/L	2.807	3195	0.010
	Zn	67		ug/L		6097	-0.003
	Zn	68		ug/L		1313	0.002
>	Ge	74		ug/L		290354	290354.324
	As	75	**0.233**	ug/L	85.763	93	0.001
	Se	77		ug/L		4954	0.003
	Se	82	**-0.605**	ug/L	21.685	-54	-0.000
	Kr	83		ug/L		184	0.000
	Sr	88	**1.234**	ug/L	1.904	11826	0.059
	Y	89		ug/L		350	0.002
	Mo	98	**1964.439**	ug/L	2.072	4573129	23.304
	Ag	107	**0.054**	ug/L	7.048	276	0.001
	Cd	111	**0.390**	ug/L	12.056	443	0.002
	Cd	114		ug/L		6363	0.032
>	In	115		ug/L		196232	196232.074
	Sn	120	**0.101**	ug/L	6.473	730	0.003
	Sb	121	**0.078**	ug/L	32.499	779	0.002
	Sb	123		ug/L		627	0.001
	Ba	135		ug/L		871	0.002
	Ba	137	**0.671**	ug/L	0.967	1467	0.003
	Ho	165		ug/L		973	0.002
>	Lu	175		ug/L		416675	416674.668
	Tl	205	**0.037**	ug/L	14.805	2092	0.002
	Pb	208	**0.185**	ug/L	0.402	5767	0.012
	Bi	209		ug/L		1206	0.003
	Th	232	**0.015**	ug/L	49.731	1646	0.001
	U	238	**-0.012**	ug/L	1.174	324	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	95.070				
	Mg	24	95.206				
	Al	27	95.836				
	P	31	96.808				
	K	39	91.318				
	Ca	43	92.684				
>	Sc	45		100.2			
	Ti	47	70.795				
	V	51					
	Cr	52	76.755				
	Cr	53					
	Mn	55	98.135				
	Fe	57	91.562				
	Co	59	107.938				
	Ni	60	101.385				
	Cu	63					
	Cu	65	91.623				
	Zn	66	96.847				
	Zn	67					
	Zn	68					
>	Ge	74		97.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	102.853				
	Y	89					
	Mo	98	98.222				
	Ag	107					
	Cd	111	97.606				
	Cd	114					
>	In	115		93.8			
	Sn	120					
	Sb	121	78.151				
	Sb	123					
	Ba	135					
	Ba	137	100.166				
	Ho	165					
>	Lu	175		92.2			
	Tl	205					
	Pb	208	92.308				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Friday, January 15, 2010 22:23:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 5.278

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.064**	**ug/L**	5.585	19731	0.025
	Be	9	**19.610**	**ug/L**	1.107	6161	0.008
	B	11	**19.168**	**ug/L**	3.986	6597	0.008
	Na	23	**96763.854**	**ug/L**	3.003	387705937	489.475
	Mg	24	**98177.744**	**ug/L**	4.151	280283481	353.922
	Al	27	**96768.332**	**ug/L**	3.574	361488890	456.639
	P	31	**97332.379**	**ug/L**	3.549	18425280	23.267
	K	39	**97121.550**	**ug/L**	4.938	483727994	610.391
	Ca	43	**92250.191**	**ug/L**	2.472	982493	1.241
>	Sc	45		**ug/L**		791904	791904.277
	Ti	47	**1415.561**	**ug/L**	1.475	683722	0.863
	V	51	**20.397**	**ug/L**	3.179	114952	0.141
	Cr	52	**22.383**	**ug/L**	2.696	93316	0.120
	Cr	53		**ug/L**		63173	-0.014
	Mn	55	**25.303**	**ug/L**	2.433	184525	0.231
	Fe	57	**91065.510**	**ug/L**	1.593	12735516	16.079
	Co	59	**18.865**	**ug/L**	1.700	103121	0.130
	Ni	60	**20.929**	**ug/L**	2.620	24491	0.031
	Cu	63		**ug/L**		54478	0.069
	Cu	65	**20.363**	**ug/L**	1.361	27403	0.034
	Zn	66	**22.435**	**ug/L**	1.209	19502	0.067
	Zn	67		**ug/L**		8323	0.005
	Zn	68		**ug/L**		12588	0.041
>	Ge	74		**ug/L**		289467	289467.391
	As	75	**20.597**	**ug/L**	5.257	16989	0.059
	Se	77		**ug/L**		5937	0.006
	Se	82	**19.847**	**ug/L**	0.200	1629	0.006
	Kr	83		**ug/L**		204	0.000
	Sr	88	**23.999**	**ug/L**	1.579	220937	1.152
	Y	89		**ug/L**		344	0.002
	Mo	98	**2015.806**	**ug/L**	2.118	4583143	23.913
	Ag	107	**19.689**	**ug/L**	1.404	79123	0.413
	Cd	111	**20.364**	**ug/L**	2.660	21424	0.112
	Cd	114		**ug/L**		56816	0.296
>	In	115		**ug/L**		191671	191671.486
	Sn	120	**20.535**	**ug/L**	1.414	98031	0.510
	Sb	121	**21.683**	**ug/L**	3.123	87576	0.455
	Sb	123		**ug/L**		68043	0.353
	Ba	135		**ug/L**		24464	0.058
	Ba	137	**20.467**	**ug/L**	1.554	43441	0.103
	Ho	165		**ug/L**		997	0.002
>	Lu	175		**ug/L**		420931	420930.768
	Tl	205	**21.448**	**ug/L**	2.112	372320	0.881
	Pb	208	**21.279**	**ug/L**	1.842	596696	1.416
	Bi	209		**ug/L**		1634	0.004
	Th	232	**23.309**	**ug/L**	1.936	810472	1.923
	U	238	**23.293**	**ug/L**	1.965	886607	2.105

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	100.322				
	Be	9	98.049				
	B	11	95.838				
	Na	23	96.764				
	Mg	24	98.178				
	Al	27	96.768				
	P	31	97.332				
	K	39	97.122				
	Ca	43	92.250				
>	Sc	45		100.4			
	Ti	47	70.778				
	V	51	101.986				
	Cr	52	94.444				
	Cr	53					
	Mn	55	98.074				
	Fe	57	91.066				
	Co	59	93.163				
	Ni	60	92.198				
	Cu	63					
	Cu	65	88.920				
	Zn	66	95.065				
	Zn	67					
	Zn	68					
>	Ge	74		96.7			
	As	75	102.985				
	Se	77					
	Se	82	99.237				
	Kr	83					
	Sr	88	113.204				
	Y	89					
	Mo	98	100.790				
	Ag	107	98.447				
	Cd	111	99.822				
	Cd	114					
>	In	115		91.6			
	Sn	120	102.677				
	Sb	121	107.873				
	Sb	123					
	Ba	135					
	Ba	137	99.019				
	Ho	165					
>	Lu	175		93.1			
	Tl	205	107.241				
	Pb	208	105.341				
	Bi	209					
	Th	232	116.544				
	U	238	116.467				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Friday, January 15, 2010 22:29:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 6.279

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.742**	ug/L	3.681	52462	0.065
	Be	9	**52.733**	ug/L	1.389	16760	0.021
	B	11	**100.307**	ug/L	1.959	33684	0.042
	Na	23	**4658.047**	ug/L	14.397	18915353	23.563
	Mg	24	**5085.206**	ug/L	4.046	14712436	18.332
	Al	27	**4971.309**	ug/L	9.031	18843298	23.459
	P	31	**5083.520**	ug/L	0.852	981529	1.215
	K	39	**4596.038**	ug/L	16.706	23678993	28.885
	Ca	43	**4964.796**	ug/L	1.138	53833	0.067
>	Sc	45		ug/L		802429	802428.677
	Ti	47	**50.408**	ug/L	2.355	24954	0.031
	V	51	**50.227**	ug/L	2.761	281509	0.346
	Cr	52	**50.681**	ug/L	1.385	215941	0.271
	Cr	53		ug/L		94748	0.025
	Mn	55	**51.750**	ug/L	2.489	380854	0.473
	Fe	57	**5101.221**	ug/L	2.624	727320	0.901
	Co	59	**49.807**	ug/L	1.114	275591	0.343
	Ni	60	**51.104**	ug/L	1.526	60401	0.075
	Cu	63		ug/L		142683	0.178
	Cu	65	**50.568**	ug/L	1.371	68736	0.085
	Zn	66	**51.671**	ug/L	1.920	46663	0.154
	Zn	67		ug/L		13871	0.022
	Zn	68		ug/L		32850	0.106
>	Ge	74		ug/L		302389	302388.894
	As	75	**48.972**	ug/L	3.231	42340	0.140
	Se	77		ug/L		7548	0.011
	Se	82	**49.820**	ug/L	4.253	4277	0.014
	Kr	83		ug/L		80	-0.000
	Sr	88	**53.371**	ug/L	0.432	527177	2.561
	Y	89		ug/L		86	0.000
	Mo	98	**50.692**	ug/L	1.058	123834	0.601
	Ag	107	**51.107**	ug/L	0.433	220389	1.071
	Cd	111	**51.569**	ug/L	1.339	58208	0.283
	Cd	114		ug/L		143721	0.698
>	In	115		ug/L		205765	205765.285
	Sn	120	**51.474**	ug/L	0.834	263432	1.279
	Sb	121	**52.015**	ug/L	0.572	224899	1.091
	Sb	123		ug/L		177135	0.859
	Ba	135		ug/L		66584	0.144
	Ba	137	**50.036**	ug/L	2.373	116213	0.252
	Ho	165		ug/L		42	0.000
>	Lu	175		ug/L		461044	461044.388
	Tl	205	**52.116**	ug/L	1.958	988573	2.141
	Pb	208	**52.784**	ug/L	2.062	1620137	3.513
	Bi	209		ug/L		500	0.001
	Th	232	**50.545**	ug/L	1.874	1923245	4.170
	U	238	**51.897**	ug/L	2.858	2162173	4.689

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.484				
	Be	9	105.466				
	B	11	100.307				
	Na	23	93.161				
	Mg	24	101.704				
	Al	27	98.442				
	P	31	101.670				
	K	39	91.921				
	Ca	43	99.296				
>	Sc	45		101.7			
	Ti	47	100.817				
	V	51	100.454				
	Cr	52	101.361				
	Cr	53					
	Mn	55	103.500				
	Fe	57	102.024				
	Co	59	99.614				
	Ni	60	102.208				
	Cu	63					
	Cu	65	101.136				
	Zn	66	103.343				
	Zn	67					
	Zn	68					
>	Ge	74		101.1			
	As	75	97.945				
	Se	77					
	Se	82	99.640				
	Kr	83					
	Sr	88	106.742				
	Y	89					
	Mo	98	101.383				
	Ag	107	102.213				
	Cd	111	103.139				
	Cd	114					
>	In	115		98.4			
	Sn	120	102.948				
	Sb	121	104.030				
	Sb	123					
	Ba	135					
	Ba	137	100.073				
	Ho	165					
>	Lu	175		102.0			
	Tl	205	104.232				
	Pb	208	105.568				
	Bi	209					
	Th	232	101.090				
	U	238	103.794				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Friday, January 15, 2010 22:35:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 7.280

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.028**	**ug/L**	59.310	80	0.000
	Be	9	**-0.005**	**ug/L**	584.821	16	-0.000
	B	11	**2.503**	**ug/L**	28.974	1123	0.001
	Na	23	**1.244**	**ug/L**	72.296	27026	0.006
	Mg	24	**0.346**	**ug/L**	155.347	7669	0.001
	Al	27	**1.691**	**ug/L**	74.072	14341	0.008
	P	31	**-0.849**	**ug/L**	315.909	6236	-0.000
	K	39	**-5.852**	**ug/L**	122.985	487198	-0.037
	Ca	43	**-0.668**	**ug/L**	413.212	247	-0.000
>	Sc	45		**ug/L**		790480	790479.594
	Ti	47	**0.163**	**ug/L**	33.244	368	0.000
	V	51	**0.144**	**ug/L**	233.226	4387	0.001
	Cr	52	**-0.046**	**ug/L**	45.701	-1605	-0.000
	Cr	53		**ug/L**		71108	-0.003
	Mn	55	**-0.066**	**ug/L**	9.169	1001	-0.001
	Fe	57	**-0.676**	**ug/L**	83.110	4541	-0.000
	Co	59	**0.001**	**ug/L**	230.587	189	0.000
	Ni	60	**0.005**	**ug/L**	84.442	144	0.000
	Cu	63		**ug/L**		247	0.000
	Cu	65	**0.002**	**ug/L**	174.349	151	0.000
	Zn	66	**0.010**	**ug/L**	402.764	197	0.000
	Zn	67		**ug/L**		6938	-0.001
	Zn	68		**ug/L**		717	-0.000
>	Ge	74		**ug/L**		297414	297414.112
	As	75	**0.041**	**ug/L**	613.668	-70	0.000
	Se	77		**ug/L**		4412	0.001
	Se	82	**0.024**	**ug/L**	426.160	-2	0.000
	Kr	83		**ug/L**		82	-0.000
	Sr	88	**0.001**	**ug/L**	51.424	232	0.000
	Y	89		**ug/L**		40	-0.000
	Mo	98	**0.093**	**ug/L**	6.522	338	0.001
	Ag	107	**0.001**	**ug/L**	159.271	63	0.000
	Cd	111	**0.001**	**ug/L**	1953.538	25	0.000
	Cd	114		**ug/L**		46	-0.000
>	In	115		**ug/L**		210147	210147.321
	Sn	120	**0.054**	**ug/L**	32.310	539	0.001
	Sb	121	**0.284**	**ug/L**	31.328	1745	0.006
	Sb	123		**ug/L**		1426	0.005
	Ba	135		**ug/L**		43	-0.000
	Ba	137	**0.001**	**ug/L**	239.721	67	0.000
	Ho	165		**ug/L**		15	-0.000
>	Lu	175		**ug/L**		463456	463456.363
	Tl	205	**0.232**	**ug/L**	26.077	6039	0.010
	Pb	208	**0.001**	**ug/L**	58.285	737	0.000
	Bi	209		**ug/L**		206	0.000
	Th	232	**0.052**	**ug/L**	32.013	3249	0.004
	U	238	**0.005**	**ug/L**	59.467	1040	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Friday, January 15, 2010 22:41:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 10.281

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**1007.643**	ug/L	5.774	919922	1.247
	Be	9	**1028.566**	ug/L	5.055	300050	0.407
	B	11	**1.247**	ug/L	9.862	665	0.001
	Na	23	**49716.044**	ug/L	9.489	185558151	251.486
	Mg	24	**49044.658**	ug/L	7.795	130356495	176.802
	Al	27	**59251.995**	ug/L	3.167	206183870	279.604
	P	31	**25734.804**	ug/L	2.301	4544086	6.152
	K	39	**49656.732**	ug/L	3.339	230736651	312.083
	Ca	43	**50255.624**	ug/L	1.061	498697	0.676
>	Sc	45		ug/L		737568	737567.607
	Ti	47	**39.968**	ug/L	0.942	18247	0.024
	V	51	**951.321**	ug/L	0.540	4841436	6.560
	Cr	52	**962.791**	ug/L	1.152	3794696	5.146
	Cr	53		ug/L		545995	0.647
	Mn	55	**939.277**	ug/L	0.937	6330889	8.582
	Fe	57	**49451.759**	ug/L	0.682	6444075	8.731
	Co	59	**904.446**	ug/L	1.109	4597291	6.233
	Ni	60	**924.730**	ug/L	1.112	1002370	1.359
	Cu	63		ug/L		2386681	3.236
	Cu	65	**887.860**	ug/L	1.653	1106939	1.501
	Zn	66	**2140.771**	ug/L	0.392	1774917	6.369
	Zn	67		ug/L		307167	1.078
	Zn	68		ug/L		1271506	4.560
>	Ge	74		ug/L		278674	278674.385
	As	75	**901.887**	ug/L	0.846	720541	2.586
	Se	77		ug/L		32991	0.104
	Se	82	**477.746**	ug/L	2.147	37849	0.136
	Kr	83		ug/L		144	0.000
	Sr	88	**1051.323**	ug/L	0.572	9102382	50.448
	Y	89		ug/L		344	0.002
	Mo	98	**1106.197**	ug/L	0.677	2367651	13.123
	Ag	107	**248.597**	ug/L	1.195	939670	5.209
	Cd	111	**972.883**	ug/L	1.471	962455	5.335
	Cd	114		ug/L		2497499	13.843
>	In	115		ug/L		180424	180423.550
	Sn	120	**1069.049**	ug/L	0.829	4792552	26.564
	Sb	121	**259.026**	ug/L	1.652	980244	5.431
	Sb	123		ug/L		777793	4.309
	Ba	135		ug/L		1116484	2.691
	Ba	137	**865.011**	ug/L	0.876	1807670	4.356
	Ho	165		ug/L		352	0.001
>	Lu	175		ug/L		414947	414946.882
	Tl	205	**506.681**	ug/L	3.225	8638731	20.817
	Pb	208	**5068.677**	ug/L	1.845	139979867	337.353
	Bi	209		ug/L		3959	0.009
	Th	232	**2723.978**	ug/L	2.427	93239234	224.711
	U	238	**5505.956**	ug/L	2.162	206441843	497.515

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈	Li	7	100.764				
|	Be	9	102.857				
|	B	11					
|	Na	23	99.432				
|	Mg	24	98.089				
|	Al	27	118.504				
|	P	31	102.939				
|	K	39	99.313				
|	Ca	43	100.511				
|>	Sc	45		93.5			
|	Ti	47					
|	V	51	95.132				
|	Cr	52	96.279				
|	Cr	53					
|	Mn	55	93.928				
|	Fe	57	98.904				
|	Co	59	90.445				
|	Ni	60	92.473				
|	Cu	63					
⌊	Cu	65	88.786				
⌈	Zn	66	85.631				
|	Zn	67					
|	Zn	68					
|>	Ge	74		93.1			
|	As	75	90.189				
|	Se	77					
|	Se	82	95.549				
⌊	Kr	83					
⌈	Sr	88	105.132				
|	Y	89					
|	Mo	98	110.620				
|	Ag	107	99.439				
|	Cd	111	97.288				
|	Cd	114					
|>	In	115		86.3			
|	Sn	120	106.905				
|	Sb	121	103.610				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	86.501				
|	Ho	165					
|>	Lu	175		91.8			
|	Tl	205	101.336				
|	Pb	208	101.374				
|	Bi	209					
|	Th	232	108.959				
⌊	U	238	110.119				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Al	27	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
QC Std 10	Zn	66	LRS is out of limits (+/- 10%)
QC Std 10	Mo	98	LRS is out of limits (+/- 10%)
QC Std 10	Ba	137	LRS is out of limits (+/- 10%)
QC Std 10	U	238	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Friday, January 15, 2010 22:47:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 11.282

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.165**	ug/L	8.327	49866	0.063
	Be	9	**52.194**	ug/L	3.436	16254	0.021
	B	11	**99.094**	ug/L	0.916	32615	0.041
	Na	23	**4838.770**	ug/L	9.028	19258570	24.477
	Mg	24	**4935.061**	ug/L	5.155	13991838	17.790
	Al	27	**5093.491**	ug/L	10.350	18907230	24.036
	P	31	**5216.728**	ug/L	2.990	986713	1.247
	K	39	**4653.879**	ug/L	9.084	23500955	29.249
	Ca	43	**5026.672**	ug/L	2.554	53400	0.068
>	Sc	45		ug/L		786268	786267.900
	Ti	47	**49.966**	ug/L	2.074	24242	0.030
	V	51	**51.086**	ug/L	0.963	280535	0.352
	Cr	52	**52.283**	ug/L	1.364	218331	0.279
	Cr	53		ug/L		95678	0.028
	Mn	55	**53.179**	ug/L	1.325	383517	0.486
	Fe	57	**5250.003**	ug/L	1.679	733412	0.927
	Co	59	**51.424**	ug/L	0.379	278820	0.354
	Ni	60	**52.997**	ug/L	1.819	61369	0.078
	Cu	63		ug/L		141871	0.180
	Cu	65	**51.771**	ug/L	0.429	68955	0.088
	Zn	66	**52.789**	ug/L	1.136	47057	0.157
	Zn	67		ug/L		14371	0.024
	Zn	68		ug/L		33024	0.108
>	Ge	74		ug/L		298433	298433.351
	As	75	**49.698**	ug/L	1.185	42426	0.143
	Se	77		ug/L		7034	0.009
	Se	82	**50.324**	ug/L	0.523	4266	0.014
	Kr	83		ug/L		82	-0.000
	Sr	88	**52.442**	ug/L	2.256	521542	2.516
	Y	89		ug/L		68	0.000
	Mo	98	**49.660**	ug/L	2.292	122132	0.589
	Ag	107	**50.589**	ug/L	2.534	219606	1.060
	Cd	111	**51.225**	ug/L	1.571	58216	0.281
	Cd	114		ug/L		143166	0.691
>	In	115		ug/L		207206	207206.158
	Sn	120	**52.363**	ug/L	1.725	269801	1.301
	Sb	121	**54.287**	ug/L	1.940	236293	1.138
	Sb	123		ug/L		182353	0.878
	Ba	135		ug/L		66238	0.145
	Ba	137	**50.499**	ug/L	0.507	115858	0.254
	Ho	165		ug/L		37	0.000
>	Lu	175		ug/L		455326	455326.130
	Tl	205	**54.335**	ug/L	1.559	1018036	2.232
	Pb	208	**54.599**	ug/L	1.195	1655265	3.634
	Bi	209		ug/L		484	0.001
	Th	232	**53.167**	ug/L	2.491	1998421	4.386
	U	238	**54.614**	ug/L	0.552	2247743	4.935

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	102.329				
	Be	9	104.389				
	B	11	99.094				
	Na	23	96.775				
	Mg	24	98.701				
	Al	27	100.861				
	P	31	104.335				
	K	39	93.078				
	Ca	43	100.533				
>	Sc	45		99.7			
	Ti	47	99.933				
	V	51	102.171				
	Cr	52	104.567				
	Cr	53					
	Mn	55	106.358				
	Fe	57	105.000				
	Co	59	102.848				
	Ni	60	105.993				
	Cu	63					
	Cu	65	103.542				
	Zn	66	105.578				
	Zn	67					
	Zn	68					
>	Ge	74		99.7			
	As	75	99.396				
	Se	77					
	Se	82	100.648				
	Kr	83					
	Sr	88	104.884				
	Y	89					
	Mo	98	99.321				
	Ag	107	101.179				
	Cd	111	102.449				
	Cd	114					
>	In	115		99.1			
	Sn	120	104.726				
	Sb	121	108.574				
	Sb	123					
	Ba	135					
	Ba	137	100.997				
	Ho	165					
>	Lu	175		100.8			
	Tl	205	108.670				
	Pb	208	109.198				
	Bi	209					
	Th	232	106.335				
	U	238	109.229				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Friday, January 15, 2010 22:53:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 12.283

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.055**	**ug/L**	21.120	105	0.000
	Be	9	**0.007**	**ug/L**	116.889	20	0.000
	B	11	**2.514**	**ug/L**	24.902	1115	0.001
	Na	23	**0.731**	**ug/L**	206.618	24689	0.004
	Mg	24	**-0.569**	**ug/L**	125.473	5001	-0.002
	Al	27	**0.293**	**ug/L**	250.205	9003	0.001
	P	31	**-1.493**	**ug/L**	36.964	6054	-0.000
	K	39	**2.653**	**ug/L**	199.267	523772	0.017
	Ca	43	**-1.194**	**ug/L**	123.706	239	-0.000
>	Sc	45		**ug/L**		782337	782337.406
	Ti	47	**-0.036**	**ug/L**	202.625	270	-0.000
	V	51	**0.163**	**ug/L**	84.893	4444	0.001
	Cr	52	**-0.066**	**ug/L**	69.978	-1668	-0.000
	Cr	53		**ug/L**		70231	-0.004
	Mn	55	**-0.050**	**ug/L**	14.003	1104	-0.000
	Fe	57	**0.257**	**ug/L**	510.849	4622	0.000
	Co	59	**0.045**	**ug/L**	15.097	422	0.000
	Ni	60	**0.020**	**ug/L**	42.411	159	0.000
	Cu	63		**ug/L**		299	0.000
	Cu	65	**0.023**	**ug/L**	34.138	177	0.000
	Zn	66	**0.022**	**ug/L**	130.689	206	0.000
	Zn	67		**ug/L**		7278	0.001
	Zn	68		**ug/L**		813	0.000
>	Ge	74		**ug/L**		295218	295218.010
	As	75	**0.174**	**ug/L**	17.183	44	0.000
	Se	77		**ug/L**		3967	-0.001
	Se	82	**0.154**	**ug/L**	105.073	9	0.000
	Kr	83		**ug/L**		78	-0.000
	Sr	88	**0.002**	**ug/L**	54.555	235	0.000
	Y	89		**ug/L**		44	-0.000
	Mo	98	**0.101**	**ug/L**	16.468	352	0.001
	Ag	107	**0.002**	**ug/L**	46.062	66	0.000
	Cd	111	**-0.000**	**ug/L**	20642.069	24	-0.000
	Cd	114		**ug/L**		54	0.000
>	In	115		**ug/L**		206907	206907.266
	Sn	120	**0.283**	**ug/L**	16.441	1701	0.007
	Sb	121	**0.830**	**ug/L**	18.949	4073	0.017
	Sb	123		**ug/L**		3185	0.014
	Ba	135		**ug/L**		56	0.000
	Ba	137	**0.013**	**ug/L**	22.378	95	0.000
	Ho	165		**ug/L**		18	0.000
>	Lu	175		**ug/L**		460376	460375.854
	Tl	205	**0.495**	**ug/L**	16.788	10978	0.020
	Pb	208	**0.006**	**ug/L**	12.195	884	0.000
	Bi	209		**ug/L**		190	0.000
	Th	232	**0.115**	**ug/L**	19.299	5615	0.009
	U	238	**0.041**	**ug/L**	13.539	2536	0.004

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011806
Sample Date/Time: Friday, January 15, 2010 23:00:08
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\1202011806.284

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.021**	ug/L	57.326	72	0.000
	Be	9	**-0.017**	ug/L	19.967	13	-0.000
	B	11	**0.695**	ug/L	26.213	528	0.000
	Na	23	**2.733**	ug/L	78.227	32706	0.014
	Mg	24	**-0.931**	ug/L	100.792	4001	-0.003
	Al	27	**2.976**	ug/L	70.430	19014	0.014
	P	31	**14.536**	ug/L	15.407	9071	0.003
	K	39	**4.329**	ug/L	85.099	533450	0.027
	Ca	43	**3.360**	ug/L	43.738	287	0.000
>	Sc	45		ug/L		784255	784254.761
	Ti	47	**0.077**	ug/L	47.744	324	0.000
	V	51	**-0.115**	ug/L	211.102	2958	-0.001
	Cr	52	**0.504**	ug/L	14.373	714	0.003
	Cr	53		ug/L		50432	-0.029
	Mn	55	**0.144**	ug/L	2.915	2497	0.001
	Fe	57	**26.777**	ug/L	4.552	8306	0.005
	Co	59	**0.022**	ug/L	21.056	299	0.000
	Ni	60	**0.043**	ug/L	4.329	186	0.000
	Cu	63		ug/L		584	0.000
	Cu	65	**0.107**	ug/L	7.073	288	0.000
	Zn	66	**0.704**	ug/L	5.899	799	0.002
	Zn	67		ug/L		5154	-0.007
	Zn	68		ug/L		1057	0.001
>	Ge	74		ug/L		293031	293030.918
	As	75	**0.232**	ug/L	124.313	94	0.001
	Se	77		ug/L		2386	-0.006
	Se	82	**-0.060**	ug/L	263.011	-9	-0.000
	Kr	83		ug/L		82	-0.000
	Sr	88	**0.011**	ug/L	22.895	326	0.001
	Y	89		ug/L		71	0.000
	Mo	98	**0.027**	ug/L	29.199	174	0.000
	Ag	107	**-0.006**	ug/L	26.818	30	-0.000
	Cd	111	**-0.003**	ug/L	284.091	22	-0.000
	Cd	114		ug/L		46	-0.000
>	In	115		ug/L		211663	211662.872
	Sn	120	**0.125**	ug/L	2.275	916	0.003
	Sb	121	**0.214**	ug/L	18.125	1439	0.004
	Sb	123		ug/L		1170	0.004
	Ba	135		ug/L		84	0.000
	Ba	137	**0.029**	ug/L	9.690	131	0.000
	Ho	165		ug/L		21	0.000
>	Lu	175		ug/L		458632	458631.755
	Tl	205	**0.211**	ug/L	9.217	5581	0.009
	Pb	208	**0.005**	ug/L	22.172	865	0.000
	Bi	209		ug/L		352	0.000
	Th	232	**0.083**	ug/L	22.740	4391	0.007
	U	238	**0.002**	ug/L	101.246	914	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011807
Sample Date/Time: Friday, January 15, 2010 23:06:18
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 940132|40|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\1202011807.285

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.506**	**ug/L**	5.378	2542	0.003
	Be	9	**20.043**	**ug/L**	1.463	6379	0.008
	B	11	**35.453**	**ug/L**	2.194	12102	0.015
	Na	23	**250.204**	**ug/L**	19.442	1037491	1.266
	Mg	24	**1050.519**	**ug/L**	8.666	3044594	3.787
	Al	27	**3152.808**	**ug/L**	3.559	11941408	14.878
	P	31	**203.976**	**ug/L**	1.884	45604	0.049
	K	39	**1046.660**	**ug/L**	6.472	5800129	6.578
	Ca	43	**2545.976**	**ug/L**	0.814	27725	0.034
>	Sc	45		**ug/L**		802171	802171.106
	Ti	47	**105.136**	**ug/L**	0.742	51718	0.064
	V	51	**31.260**	**ug/L**	0.512	176563	0.216
	Cr	52	**58.262**	**ug/L**	0.833	248386	0.311
	Cr	53		**ug/L**		92082	0.021
	Mn	55	**135.918**	**ug/L**	0.424	997730	1.242
	Fe	57	**4445.515**	**ug/L**	1.216	634322	0.785
	Co	59	**23.901**	**ug/L**	0.778	132312	0.165
	Ni	60	**34.292**	**ug/L**	0.333	40567	0.050
	Cu	63		**ug/L**		121480	0.151
	Cu	65	**42.665**	**ug/L**	0.597	58003	0.072
	Zn	66	**152.322**	**ug/L**	1.551	136788	0.453
	Zn	67		**ug/L**		25839	0.062
	Zn	68		**ug/L**		93335	0.307
>	Ge	74		**ug/L**		301439	301439.432
	As	75	**26.854**	**ug/L**	1.464	23106	0.077
	Se	77		**ug/L**		8062	0.012
	Se	82	**73.427**	**ug/L**	1.679	6289	0.021
	Kr	83		**ug/L**		82	-0.000
	Sr	88	**58.363**	**ug/L**	1.184	590736	2.801
	Y	89		**ug/L**		29617	0.140
	Mo	98	**12.116**	**ug/L**	0.964	30413	0.144
	Ag	107	**5.861**	**ug/L**	1.167	25950	0.123
	Cd	111	**15.731**	**ug/L**	1.408	18214	0.086
	Cd	114		**ug/L**		45315	0.215
>	In	115		**ug/L**		210860	210860.140
	Sn	120	**9.845**	**ug/L**	0.511	51837	0.245
	Sb	121	**10.870**	**ug/L**	0.874	48552	0.228
	Sb	123		**ug/L**		37898	0.178
	Ba	135		**ug/L**		64900	0.142
	Ba	137	**48.687**	**ug/L**	0.883	112370	0.245
	Ho	165		**ug/L**		2858	0.006
>	Lu	175		**ug/L**		458018	458018.445
	Tl	205	**34.420**	**ug/L**	2.058	649271	1.414
	Pb	208	**22.683**	**ug/L**	0.711	692157	1.510
	Bi	209		**ug/L**		5959	0.013
	Th	232	**3.021**	**ug/L**	1.107	115378	0.249
	U	238	**0.529**	**ug/L**	1.371	22727	0.048

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		101.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227001
Sample Date/Time: Friday, January 15, 2010 23:12:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227001.286

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**114.632**	ug/L	7.837	119526	0.142
	Be	9	**1.959**	ug/L	9.657	672	0.001
	B	11	**5.261**	ug/L	5.874	2162	0.002
	Na	23	**885.413**	ug/L	5.566	3799391	4.479
	Mg	24	**7554.690**	ug/L	5.861	22974056	27.234
	Al	27	**21282.238**	ug/L	4.229	84679484	100.429
	P	31	**330.728**	ug/L	1.017	73439	0.079
	K	39	**5476.624**	ug/L	3.892	29554232	34.420
	Ca	43	**2754.116**	ug/L	0.642	31481	0.037
>	Sc	45		ug/L		842691	842691.285
	Ti	47	**1316.718**	ug/L	0.510	676875	0.803
	V	51	**22.302**	ug/L	2.052	133442	0.154
	Cr	52	**15.080**	ug/L	0.723	66433	0.081
	Cr	53		ug/L		53571	-0.030
	Mn	55	**1092.915**	ug/L	1.185	8415681	9.986
	Fe	57	**32275.574**	ug/L	0.815	4806806	5.699
	Co	59	**3.981**	ug/L	1.151	23311	0.027
	Ni	60	**14.459**	ug/L	1.117	18052	0.021
	Cu	63		ug/L		27242	0.032
	Cu	65	**9.807**	ug/L	2.332	14127	0.017
	Zn	66	**177.162**	ug/L	1.568	154336	0.527
	Zn	67		ug/L		27721	0.071
	Zn	68		ug/L		106856	0.363
>	Ge	74		ug/L		292462	292462.358
	As	75	**3.765**	ug/L	5.455	3055	0.011
	Se	77		ug/L		2386	-0.006
	Se	82	**0.483**	ug/L	25.422	36	0.000
	Kr	83		ug/L		161	0.000
	Sr	88	**22.163**	ug/L	1.551	220531	1.063
	Y	89		ug/L		849222	4.099
	Mo	98	**2.774**	ug/L	2.908	6920	0.033
	Ag	107	**0.360**	ug/L	3.620	1619	0.008
	Cd	111	**1.118**	ug/L	10.800	1294	0.006
	Cd	114		ug/L		439	0.002
>	In	115		ug/L		207209	207209.346
	Sn	120	**6.343**	ug/L	1.912	32903	0.158
	Sb	121	**0.231**	ug/L	7.893	1486	0.005
	Sb	123		ug/L		1207	0.004
	Ba	135		ug/L		216094	0.452
	Ba	137	**155.530**	ug/L	2.882	374739	0.783
	Ho	165		ug/L		90477	0.189
>	Lu	175		ug/L		478444	478444.313
	Tl	205	**0.490**	ug/L	8.679	11313	0.020
	Pb	208	**20.779**	ug/L	0.576	662379	1.383
	Bi	209		ug/L		2696	0.005
	Th	232	**22.407**	ug/L	0.935	885672	1.848
	U	238	**2.813**	ug/L	0.679	122474	0.254

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		106.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1202011808
Sample Date/Time: Friday, January 15, 2010 23:18:40
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\1202011808.287

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**36.907**	**ug/L**	5.399	37867	0.046
	Be	9	**1.618**	**ug/L**	4.129	549	0.001
	B	11	**2.970**	**ug/L**	5.311	1338	0.001
	Na	23	**396.561**	**ug/L**	3.758	1683004	2.006
	Mg	24	**2630.444**	**ug/L**	5.227	7852128	9.483
	Al	27	**14798.033**	**ug/L**	3.550	57816875	69.830
	P	31	**301.034**	**ug/L**	2.628	66250	0.072
	K	39	**2023.906**	**ug/L**	5.763	11063364	12.720
	Ca	43	**2349.301**	**ug/L**	1.162	26414	0.032
>	Sc	45		**ug/L**		827667	827667.149
	Ti	47	**979.559**	**ug/L**	1.350	494632	0.597
	V	51	**16.846**	**ug/L**	3.261	99887	0.116
	Cr	52	**13.949**	**ug/L**	3.260	60224	0.075
	Cr	53		**ug/L**		50587	-0.032
	Mn	55	**723.650**	**ug/L**	1.748	5473394	6.612
	Fe	57	**25998.843**	**ug/L**	1.100	3804425	4.590
	Co	59	**2.807**	**ug/L**	2.916	16199	0.019
	Ni	60	**10.691**	**ug/L**	1.528	13147	0.016
	Cu	63		**ug/L**		20583	0.025
	Cu	65	**7.432**	**ug/L**	1.030	10552	0.013
	Zn	66	**113.075**	**ug/L**	1.663	99412	0.336
	Zn	67		**ug/L**		19348	0.041
	Zn	68		**ug/L**		69060	0.231
>	Ge	74		**ug/L**		294984	294984.399
	As	75	**2.923**	**ug/L**	9.905	2370	0.008
	Se	77		**ug/L**		2238	-0.007
	Se	82	**0.299**	**ug/L**	17.034	21	0.000
	Kr	83		**ug/L**		148	0.000
	Sr	88	**17.026**	**ug/L**	1.132	171368	0.817
	Y	89		**ug/L**		630269	3.009
	Mo	98	**1.596**	**ug/L**	3.233	4071	0.019
	Ag	107	**0.198**	**ug/L**	4.726	925	0.004
	Cd	111	**0.774**	**ug/L**	6.910	914	0.004
	Cd	114		**ug/L**		285	0.001
>	In	115		**ug/L**		209490	209489.721
	Sn	120	**3.634**	**ug/L**	0.941	19168	0.090
	Sb	121	**0.343**	**ug/L**	3.700	1996	0.007
	Sb	123		**ug/L**		1565	0.006
	Ba	135		**ug/L**		132602	0.275
	Ba	137	**96.083**	**ug/L**	0.562	232884	0.484
	Ho	165		**ug/L**		65316	0.136
>	Lu	175		**ug/L**		481135	481134.748
	Tl	205	**0.213**	**ug/L**	5.816	5898	0.009
	Pb	208	**8.061**	**ug/L**	0.835	258871	0.536
	Bi	209		**ug/L**		2337	0.005
	Th	232	**18.355**	**ug/L**	1.331	729816	1.514
	U	238	**1.773**	**ug/L**	1.455	77961	0.160

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		104.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011809
Sample Date/Time: Friday, January 15, 2010 23:24:49
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\1202011809.288

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**58.931**	**ug/L**	8.493	61057	0.073
	Be	9	**24.791**	**ug/L**	6.829	8222	0.010
	B	11	**48.606**	**ug/L**	1.121	17199	0.020
	Na	23	**1328.907**	**ug/L**	4.502	5647485	6.722
	Mg	24	**3475.574**	**ug/L**	5.911	10505844	12.529
	Al	27	**17554.512**	**ug/L**	3.091	69380250	82.838
	P	31	**1258.663**	**ug/L**	1.204	258631	0.301
	K	39	**2983.110**	**ug/L**	2.472	16243144	18.748
	Ca	43	**3319.022**	**ug/L**	1.946	37629	0.045
>	Sc	45		**ug/L**		837218	837218.332
	Ti	47	**1167.597**	**ug/L**	2.592	596132	0.712
	V	51	**42.385**	**ug/L**	1.547	248464	0.292
	Cr	52	**38.235**	**ug/L**	1.467	169588	0.204
	Cr	53		**ug/L**		63088	-0.018
	Mn	55	**768.105**	**ug/L**	2.349	5875830	7.018
	Fe	57	**29103.910**	**ug/L**	1.418	4306184	5.139
	Co	59	**26.528**	**ug/L**	1.766	153209	0.183
	Ni	60	**34.946**	**ug/L**	3.322	43120	0.051
	Cu	63		**ug/L**		91705	0.109
	Cu	65	**31.533**	**ug/L**	2.446	44771	0.053
	Zn	66	**153.740**	**ug/L**	0.405	136022	0.457
	Zn	67		**ug/L**		24509	0.058
	Zn	68		**ug/L**		93149	0.311
>	Ge	74		**ug/L**		296980	296979.553
	As	75	**40.915**	**ug/L**	1.046	34740	0.117
	Se	77		**ug/L**		2886	-0.005
	Se	82	**9.419**	**ug/L**	4.985	791	0.003
	Kr	83		**ug/L**		162	0.000
	Sr	88	**42.420**	**ug/L**	0.250	429936	2.036
	Y	89		**ug/L**		712212	3.374
	Mo	98	**26.274**	**ug/L**	1.140	65902	0.312
	Ag	107	**24.623**	**ug/L**	0.884	108965	0.516
	Cd	111	**5.913**	**ug/L**	1.253	6871	0.032
	Cd	114		**ug/L**		14278	0.067
>	In	115		**ug/L**		211109	211109.094
	Sn	120	**28.304**	**ug/L**	2.327	148720	0.703
	Sb	121	**69.161**	**ug/L**	1.449	306610	1.450
	Sb	123		**ug/L**		243142	1.150
	Ba	135		**ug/L**		151482	0.316
	Ba	137	**110.005**	**ug/L**	3.860	265841	0.554
	Ho	165		**ug/L**		75053	0.156
>	Lu	175		**ug/L**		479961	479960.953
	Tl	205	**50.925**	**ug/L**	0.547	1005819	2.092
	Pb	208	**101.855**	**ug/L**	1.468	3253885	6.779
	Bi	209		**ug/L**		2977	0.006
	Th	232	**44.311**	**ug/L**	1.905	1755364	3.655
	U	238	**28.446**	**ug/L**	3.376	1234031	2.570

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		106.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202011811
Sample Date/Time: Friday, January 15, 2010 23:30:59
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\1202011811.289

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**182.566**	ug/L	4.594	196319	0.226
	Be	9	**25.137**	ug/L	0.505	8651	0.010
	B	11	**48.733**	ug/L	2.628	17868	0.020
	Na	23	**1725.514**	ug/L	3.652	7596383	8.728
	Mg	24	**7401.029**	ug/L	6.427	23144234	26.680
	Al	27	**21774.016**	ug/L	5.175	89126936	102.749
	P	31	**1823.272**	ug/L	2.648	385204	0.436
	K	39	**5023.454**	ug/L	7.275	27951894	31.571
	Ca	43	**5351.548**	ug/L	0.957	62739	0.072
>	Sc	45		ug/L		867900	867899.912
	Ti	47	**1329.677**	ug/L	2.113	703814	0.811
	V	51	**49.058**	ug/L	3.626	297409	0.338
	Cr	52	**38.892**	ug/L	3.851	178795	0.208
	Cr	53		ug/L		65027	-0.019
	Mn	55	**1832.077**	ug/L	2.932	14525449	16.740
	Fe	57	**35723.444**	ug/L	1.912	5478027	6.307
	Co	59	**28.563**	ug/L	3.269	170970	0.197
	Ni	60	**46.490**	ug/L	2.542	59429	0.068
	Cu	63		ug/L		108122	0.124
	Cu	65	**36.056**	ug/L	2.018	53046	0.061
	Zn	66	**206.023**	ug/L	0.996	183294	0.613
	Zn	67		ug/L		32130	0.083
	Zn	68		ug/L		127934	0.426
>	Ge	74		ug/L		298751	298751.135
	As	75	**43.845**	ug/L	0.417	37455	0.126
	Se	77		ug/L		2908	-0.005
	Se	82	**10.050**	ug/L	6.867	849	0.003
	Kr	83		ug/L		166	0.000
	Sr	88	**56.771**	ug/L	1.593	575179	2.724
	Y	89		ug/L		781297	3.702
	Mo	98	**27.920**	ug/L	1.154	70009	0.331
	Ag	107	**25.622**	ug/L	0.800	113363	0.537
	Cd	111	**6.514**	ug/L	1.640	7563	0.036
	Cd	114		ug/L		15031	0.071
>	In	115		ug/L		211062	211061.635
	Sn	120	**31.674**	ug/L	2.296	166364	0.787
	Sb	121	**74.658**	ug/L	0.964	330884	1.565
	Sb	123		ug/L		260550	1.233
	Ba	135		ug/L		330937	0.685
	Ba	137	**234.594**	ug/L	1.634	570401	1.181
	Ho	165		ug/L		86403	0.179
>	Lu	175		ug/L		482828	482828.080
	Tl	205	**51.621**	ug/L	2.370	1025420	2.121
	Pb	208	**107.531**	ug/L	2.074	3455383	7.157
	Bi	209		ug/L		3015	0.006
	Th	232	**43.246**	ug/L	3.417	1723064	3.567
	U	238	**28.383**	ug/L	2.229	1238854	2.565

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		110.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		106.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1202011810
Sample Date/Time: Friday, January 15, 2010 23:37:09
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 940132|10|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\1202011810.290

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**22.981**	ug/L	5.266	23262	0.028
	Be	9	**0.398**	ug/L	13.123	147	0.000
	B	11	**2.136**	ug/L	15.219	1036	0.001
	Na	23	**188.622**	ug/L	18.269	800545	0.954
	Mg	24	**1455.914**	ug/L	6.160	4289022	5.248
	Al	27	**4090.315**	ug/L	4.528	15755098	19.302
	P	31	**66.883**	ug/L	1.631	19651	0.016
	K	39	**1152.284**	ug/L	8.695	6442733	7.242
	Ca	43	**561.883**	ug/L	2.360	6427	0.008
>	Sc	45		ug/L		815944	815943.596
	Ti	47	**276.574**	ug/L	0.972	137897	0.169
	V	51	**4.438**	ug/L	8.964	28681	0.031
	Cr	52	**3.144**	ug/L	1.325	12260	0.017
	Cr	53		ug/L		58041	-0.022
	Mn	55	**225.677**	ug/L	1.217	1683954	2.062
	Fe	57	**6941.143**	ug/L	1.629	1004689	1.226
	Co	59	**0.841**	ug/L	1.836	4914	0.006
	Ni	60	**3.044**	ug/L	2.693	3793	0.004
	Cu	63		ug/L		5780	0.007
	Cu	65	**1.975**	ug/L	0.859	2877	0.003
	Zn	66	**36.356**	ug/L	1.556	32815	0.108
	Zn	67		ug/L		10195	0.010
	Zn	68		ug/L		23098	0.074
>	Ge	74		ug/L		301658	301657.701
	As	75	**0.841**	ug/L	33.713	622	0.002
	Se	77		ug/L		3080	-0.004
	Se	82	**0.167**	ug/L	79.435	10	0.000
	Kr	83		ug/L		96	0.000
	Sr	88	**4.254**	ug/L	0.883	43284	0.204
	Y	89		ug/L		175375	0.831
	Mo	98	**0.533**	ug/L	2.273	1439	0.006
	Ag	107	**0.058**	ug/L	4.859	314	0.001
	Cd	111	**0.189**	ug/L	11.984	243	0.001
	Cd	114		ug/L		115	0.000
>	In	115		ug/L		210960	210959.882
	Sn	120	**1.275**	ug/L	3.272	6940	0.032
	Sb	121	**0.128**	ug/L	22.128	1057	0.003
	Sb	123		ug/L		863	0.002
	Ba	135		ug/L		42847	0.094
	Ba	137	**33.106**	ug/L	1.854	75752	0.167
	Ho	165		ug/L		17603	0.039
>	Lu	175		ug/L		454005	454004.766
	Tl	205	**0.149**	ug/L	12.768	4363	0.006
	Pb	208	**4.311**	ug/L	0.592	130977	0.287
	Bi	209		ug/L		681	0.001
	Th	232	**4.847**	ug/L	1.121	182751	0.400
	U	238	**0.559**	ug/L	0.941	23763	0.051

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Friday, January 15, 2010 23:43:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 8.291

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.232**	ug/L	6.823	49511	0.062
	Be	9	**50.425**	ug/L	4.921	15887	0.020
	B	11	**96.302**	ug/L	1.614	32096	0.040
	Na	23	**5003.440**	ug/L	3.321	20163416	25.310
	Mg	24	**5092.535**	ug/L	2.259	14616711	18.358
	Al	27	**4942.866**	ug/L	3.768	18570891	23.325
	P	31	**5144.841**	ug/L	1.526	985360	1.230
	K	39	**4661.204**	ug/L	5.259	23857030	29.295
	Ca	43	**4963.573**	ug/L	1.625	53384	0.067
>	Sc	45		ug/L		796056	796055.581
	Ti	47	**49.935**	ug/L	2.131	24523	0.030
	V	51	**50.127**	ug/L	3.165	278694	0.346
	Cr	52	**51.056**	ug/L	0.912	215819	0.273
	Cr	53		ug/L		95068	0.026
	Mn	55	**52.012**	ug/L	3.201	379633	0.475
	Fe	57	**5186.495**	ug/L	3.055	733327	0.916
	Co	59	**50.108**	ug/L	1.288	275035	0.345
	Ni	60	**51.646**	ug/L	1.937	60542	0.076
	Cu	63		ug/L		140997	0.177
	Cu	65	**51.065**	ug/L	2.811	68837	0.086
	Zn	66	**52.342**	ug/L	2.732	46795	0.156
	Zn	67		ug/L		13917	0.022
	Zn	68		ug/L		32778	0.107
>	Ge	74		ug/L		299331	299330.842
	As	75	**48.692**	ug/L	0.901	41689	0.140
	Se	77		ug/L		7307	0.010
	Se	82	**49.100**	ug/L	4.750	4174	0.014
	Kr	83		ug/L		83	-0.000
	Sr	88	**51.863**	ug/L	1.762	513682	2.489
	Y	89		ug/L		89	0.000
	Mo	98	**49.140**	ug/L	1.306	120383	0.583
	Ag	107	**50.725**	ug/L	1.844	219333	1.063
	Cd	111	**51.121**	ug/L	1.626	57862	0.280
	Cd	114		ug/L		142870	0.692
>	In	115		ug/L		206350	206349.853
	Sn	120	**50.843**	ug/L	2.557	260901	1.263
	Sb	121	**52.024**	ug/L	1.919	225553	1.091
	Sb	123		ug/L		175918	0.851
	Ba	135		ug/L		65490	0.147
	Ba	137	**51.070**	ug/L	1.408	114599	0.257
	Ho	165		ug/L		49	0.000
>	Lu	175		ug/L		445372	445371.964
	Tl	205	**52.896**	ug/L	1.713	969383	2.173
	Pb	208	**54.100**	ug/L	1.141	1604206	3.601
	Bi	209		ug/L		487	0.001
	Th	232	**51.977**	ug/L	0.528	1910773	4.288
	U	238	**53.455**	ug/L	1.896	2151701	4.830

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	100.464				
	Be	9	100.850				
	B	11	96.302				
	Na	23	100.069				
	Mg	24	101.851				
	Al	27	97.879				
	P	31	102.897				
	K	39	93.224				
	Ca	43	99.271				
>	Sc	45		100.9			
	Ti	47	99.871				
	V	51	100.255				
	Cr	52	102.112				
	Cr	53					
	Mn	55	104.024				
	Fe	57	103.730				
	Co	59	100.217				
	Ni	60	103.291				
	Cu	63					
	Cu	65	102.131				
	Zn	66	104.684				
	Zn	67					
	Zn	68					
>	Ge	74		100.0			
	As	75	97.385				
	Se	77					
	Se	82	98.199				
	Kr	83					
	Sr	88	103.725				
	Y	89					
	Mo	98	98.280				
	Ag	107	101.450				
	Cd	111	102.242				
	Cd	114					
>	In	115		98.7			
	Sn	120	101.685				
	Sb	121	104.048				
	Sb	123					
	Ba	135					
	Ba	137	102.141				
	Ho	165					
>	Lu	175		98.6			
	Tl	205	105.792				
	Pb	208	108.201				
	Bi	209					
	Th	232	103.953				
	U	238	106.910				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Friday, January 15, 2010 23:49:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 9.292

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.033**	**ug/L**	23.211	85	0.000
	Be	9	**0.005**	**ug/L**	127.384	20	0.000
	B	11	**2.550**	**ug/L**	25.890	1140	0.001
	Na	23	**1.084**	**ug/L**	158.324	26359	0.005
	Mg	24	**-0.005**	**ug/L**	8873.182	6668	-0.000
	Al	27	**0.711**	**ug/L**	76.929	10671	0.003
	P	31	**2.117**	**ug/L**	68.825	6796	0.001
	K	39	**-0.110**	**ug/L**	2683.153	515473	-0.001
	Ca	43	**-1.423**	**ug/L**	268.215	239	-0.000
>	Sc	45		**ug/L**		790163	790162.655
	Ti	47	**0.005**	**ug/L**	420.604	292	0.000
	V	51	**-0.197**	**ug/L**	167.179	2537	-0.001
	Cr	52	**0.053**	**ug/L**	23.594	-1183	0.000
	Cr	53		**ug/L**		70300	-0.004
	Mn	55	**-0.005**	**ug/L**	29.191	1443	-0.000
	Fe	57	**1.453**	**ug/L**	70.944	4835	0.000
	Co	59	**0.012**	**ug/L**	30.952	250	0.000
	Ni	60	**0.016**	**ug/L**	36.264	157	0.000
	Cu	63		**ug/L**		228	-0.000
	Cu	65	**-0.015**	**ug/L**	4.888	128	-0.000
	Zn	66	**0.025**	**ug/L**	44.045	210	0.000
	Zn	67		**ug/L**		6856	-0.001
	Zn	68		**ug/L**		759	-0.000
>	Ge	74		**ug/L**		297879	297878.873
	As	75	**0.027**	**ug/L**	215.965	-81	0.000
	Se	77		**ug/L**		4230	-0.000
	Se	82	**-0.028**	**ug/L**	235.610	-7	-0.000
	Kr	83		**ug/L**		84	-0.000
	Sr	88	**0.005**	**ug/L**	54.956	258	0.000
	Y	89		**ug/L**		44	-0.000
	Mo	98	**0.029**	**ug/L**	44.224	173	0.000
	Ag	107	**0.002**	**ug/L**	67.265	67	0.000
	Cd	111	**0.007**	**ug/L**	70.258	32	0.000
	Cd	114		**ug/L**		63	0.000
>	In	115		**ug/L**		204320	204320.219
	Sn	120	**0.079**	**ug/L**	18.671	649	0.002
	Sb	121	**0.338**	**ug/L**	24.388	1921	0.007
	Sb	123		**ug/L**		1483	0.005
	Ba	135		**ug/L**		44	-0.000
	Ba	137	**0.008**	**ug/L**	42.505	81	0.000
	Ho	165		**ug/L**		21	0.000
>	Lu	175		**ug/L**		450058	450058.096
	Tl	205	**0.252**	**ug/L**	22.353	6243	0.010
	Pb	208	**0.006**	**ug/L**	19.884	864	0.000
	Bi	209		**ug/L**		164	0.000
	Th	232	**0.053**	**ug/L**	31.955	3189	0.004
	U	238	**0.009**	**ug/L**	26.236	1196	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		99.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227002
Sample Date/Time: Friday, January 15, 2010 23:55:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227002.293

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**35.299**	ug/L	6.555	36981	0.044
	Be	9	**1.773**	ug/L	4.310	612	0.001
	B	11	**5.963**	ug/L	4.720	2415	0.002
	Na	23	**381.189**	ug/L	6.439	1652461	1.928
	Mg	24	**3704.085**	ug/L	2.586	11292918	13.353
	Al	27	**26098.060**	ug/L	4.170	104070374	123.154
	P	31	**305.316**	ug/L	2.192	68527	0.073
	K	39	**3261.565**	ug/L	7.340	17898336	20.498
	Ca	43	**3243.982**	ug/L	1.088	37150	0.044
>	Sc	45		ug/L		845398	845398.370
	Ti	47	**675.373**	ug/L	2.844	348330	0.412
	V	51	**26.487**	ug/L	2.235	158206	0.183
	Cr	52	**17.506**	ug/L	3.054	77582	0.094
	Cr	53		ug/L		54010	-0.030
	Mn	55	**781.469**	ug/L	3.895	6035278	7.140
	Fe	57	**26810.728**	ug/L	1.365	4006223	4.734
	Co	59	**6.264**	ug/L	1.447	36681	0.043
	Ni	60	**14.681**	ug/L	2.227	18382	0.022
	Cu	63		ug/L		41136	0.048
	Cu	65	**13.980**	ug/L	3.514	20127	0.024
	Zn	66	**95.517**	ug/L	1.771	83923	0.284
	Zn	67		ug/L		17590	0.036
	Zn	68		ug/L		59336	0.199
>	Ge	74		ug/L		294731	294730.541
	As	75	**6.056**	ug/L	2.241	5015	0.017
	Se	77		ug/L		2285	-0.007
	Se	82	**0.356**	ug/L	54.246	26	0.000
	Kr	83		ug/L		124	0.000
	Sr	88	**28.293**	ug/L	1.390	283555	1.358
	Y	89		ug/L		479149	2.296
	Mo	98	**2.350**	ug/L	1.889	5923	0.028
	Ag	107	**0.228**	ug/L	4.132	1054	0.005
	Cd	111	**0.989**	ug/L	0.545	1156	0.005
	Cd	114		ug/L		933	0.004
>	In	115		ug/L		208710	208710.418
	Sn	120	**2.421**	ug/L	0.542	12812	0.060
	Sb	121	**0.216**	ug/L	8.840	1433	0.005
	Sb	123		ug/L		1130	0.004
	Ba	135		ug/L		223481	0.474
	Ba	137	**164.419**	ug/L	2.033	390159	0.828
	Ho	165		ug/L		49125	0.104
>	Lu	175		ug/L		471207	471207.246
	Tl	205	**0.360**	ug/L	2.617	8615	0.015
	Pb	208	**26.510**	ug/L	2.422	831895	1.764
	Bi	209		ug/L		11347	0.024
	Th	232	**18.126**	ug/L	0.672	705827	1.495
	U	238	**19.120**	ug/L	2.049	814759	1.728

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227003
Sample Date/Time: Saturday, January 16, 2010 00:01:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227003.294

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**26.576**	**ug/L**	4.622	27243	0.033
	Be	9	**2.294**	**ug/L**	10.140	768	0.001
	B	11	**4.923**	**ug/L**	6.279	2005	0.002
	Na	23	**481.043**	**ug/L**	10.386	2036840	2.433
	Mg	24	**3110.405**	**ug/L**	8.946	9274711	11.213
	Al	27	**22246.141**	**ug/L**	2.960	86814261	104.977
	P	31	**336.998**	**ug/L**	3.152	73304	0.081
	K	39	**2660.052**	**ug/L**	4.049	14365404	16.718
	Ca	43	**3268.863**	**ug/L**	1.186	36614	0.044
>	Sc	45		**ug/L**		826700	826700.088
	Ti	47	**911.718**	**ug/L**	1.889	459803	0.556
	V	51	**23.477**	**ug/L**	1.821	137580	0.162
	Cr	52	**24.713**	**ug/L**	0.770	107743	0.132
	Cr	53		**ug/L**		53165	-0.029
	Mn	55	**712.673**	**ug/L**	1.539	5384013	6.512
	Fe	57	**30097.241**	**ug/L**	2.858	4396734	5.314
	Co	59	**4.323**	**ug/L**	1.624	24813	0.030
	Ni	60	**13.247**	**ug/L**	0.894	16237	0.019
	Cu	63		**ug/L**		35529	0.043
	Cu	65	**12.407**	**ug/L**	1.834	17490	0.021
	Zn	66	**121.906**	**ug/L**	1.208	105150	0.363
	Zn	67		**ug/L**		19591	0.044
	Zn	68		**ug/L**		72400	0.248
>	Ge	74		**ug/L**		289451	289451.291
	As	75	**5.777**	**ug/L**	1.452	4693	0.017
	Se	77		**ug/L**		2117	-0.007
	Se	82	**0.546**	**ug/L**	8.679	41	0.000
	Kr	83		**ug/L**		151	0.000
	Sr	88	**27.065**	**ug/L**	0.814	268620	1.299
	Y	89		**ug/L**		771826	3.735
	Mo	98	**2.290**	**ug/L**	1.345	5717	0.027
	Ag	107	**0.254**	**ug/L**	0.967	1155	0.005
	Cd	111	**1.039**	**ug/L**	3.082	1202	0.006
	Cd	114		**ug/L**		348	0.001
>	In	115		**ug/L**		206684	206683.880
	Sn	120	**3.773**	**ug/L**	1.554	19625	0.094
	Sb	121	**0.200**	**ug/L**	6.816	1349	0.004
	Sb	123		**ug/L**		1052	0.003
	Ba	135		**ug/L**		164692	0.345
	Ba	137	**119.412**	**ug/L**	1.778	286659	0.601
	Ho	165		**ug/L**		75727	0.159
>	Lu	175		**ug/L**		476612	476612.030
	Tl	205	**0.230**	**ug/L**	1.484	6165	0.009
	Pb	208	**13.853**	**ug/L**	1.866	440111	0.922
	Bi	209		**ug/L**		6125	0.013
	Th	232	**20.736**	**ug/L**	2.159	816492	1.711
	U	238	**4.460**	**ug/L**	3.176	192927	0.403

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		104.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		96.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227004
Sample Date/Time: Saturday, January 16, 2010 00:08:00
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227004.295

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**60.921**	**ug/L**	6.979	63998	0.075
	Be	9	**1.782**	**ug/L**	8.252	617	0.001
	B	11	**6.044**	**ug/L**	5.439	2452	0.003
	Na	23	**780.036**	**ug/L**	2.862	3369770	3.946
	Mg	24	**6044.639**	**ug/L**	2.205	18488265	21.790
	Al	27	**28317.788**	**ug/L**	3.833	113321074	133.629
	P	31	**650.848**	**ug/L**	2.438	138808	0.156
	K	39	**4539.740**	**ug/L**	5.909	24747218	28.531
	Ca	43	**5018.854**	**ug/L**	1.746	57519	0.067
>	Sc	45		**ug/L**		848098	848098.194
	Ti	47	**1112.497**	**ug/L**	1.400	575612	0.678
	V	51	**40.091**	**ug/L**	2.788	238282	0.276
	Cr	52	**36.731**	**ug/L**	1.509	164994	0.196
	Cr	53		**ug/L**		61766	-0.021
	Mn	55	**566.234**	**ug/L**	0.233	4389405	5.174
	Fe	57	**40295.657**	**ug/L**	1.527	6038617	7.115
	Co	59	**5.913**	**ug/L**	2.048	34752	0.041
	Ni	60	**20.903**	**ug/L**	2.504	26199	0.031
	Cu	63		**ug/L**		45188	0.053
	Cu	65	**15.793**	**ug/L**	0.380	22801	0.027
	Zn	66	**130.456**	**ug/L**	0.868	115671	0.388
	Zn	67		**ug/L**		21763	0.049
	Zn	68		**ug/L**		81271	0.270
>	Ge	74		**ug/L**		297585	297584.576
	As	75	**5.249**	**ug/L**	7.391	4375	0.015
	Se	77		**ug/L**		2193	-0.007
	Se	82	**0.172**	**ug/L**	99.877	10	0.000
	Kr	83		**ug/L**		174	0.000
	Sr	88	**44.130**	**ug/L**	1.349	443248	2.118
	Y	89		**ug/L**		652310	3.118
	Mo	98	**4.651**	**ug/L**	1.508	11646	0.055
	Ag	107	**0.334**	**ug/L**	2.895	1522	0.007
	Cd	111	**1.098**	**ug/L**	12.537	1285	0.006
	Cd	114		**ug/L**		345	0.001
>	In	115		**ug/L**		209221	209221.042
	Sn	120	**5.303**	**ug/L**	1.619	27822	0.132
	Sb	121	**0.102**	**ug/L**	5.035	937	0.002
	Sb	123		**ug/L**		742	0.002
	Ba	135		**ug/L**		291765	0.617
	Ba	137	**211.966**	**ug/L**	1.013	504656	1.067
	Ho	165		**ug/L**		69656	0.147
>	Lu	175		**ug/L**		472710	472709.595
	Tl	205	**0.342**	**ug/L**	1.331	8292	0.014
	Pb	208	**14.317**	**ug/L**	1.260	451151	0.953
	Bi	209		**ug/L**		5980	0.012
	Th	232	**20.666**	**ug/L**	1.196	807125	1.705
	U	238	**2.029**	**ug/L**	2.511	87537	0.183

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227005
Sample Date/Time: Saturday, January 16, 2010 00:14:11
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227005.296

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**60.333**	ug/L	5.243	64884	0.075
	Be	9	**3.296**	ug/L	3.953	1151	0.001
	B	11	**14.339**	ug/L	0.573	5493	0.006
	Na	23	**561.640**	ug/L	3.131	2488925	2.841
	Mg	24	**9196.128**	ug/L	6.005	28760114	33.151
	Al	27	**66826.270**	ug/L	3.533	273607241	315.346
	P	31	**412.014**	ug/L	4.149	92463	0.098
	K	39	**9104.254**	ug/L	1.818	50206586	57.219
	Ca	43	**8682.867**	ug/L	4.470	101567	0.117
>	Sc	45		ug/L		867643	867643.413
	Ti	47	**1026.462**	ug/L	0.648	543351	0.626
	V	51	**70.944**	ug/L	3.216	428299	0.489
	Cr	52	**60.356**	ug/L	2.093	278341	0.323
	Cr	53		ug/L		75244	-0.007
	Mn	55	**878.752**	ug/L	1.677	6967419	8.029
	Fe	57	**47903.492**	ug/L	2.771	7342268	8.458
	Co	59	**18.584**	ug/L	1.445	111310	0.128
	Ni	60	**37.118**	ug/L	2.079	47473	0.055
	Cu	63		ug/L		74810	0.086
	Cu	65	**25.029**	ug/L	1.504	36867	0.042
	Zn	66	**128.939**	ug/L	1.430	113181	0.384
	Zn	67		ug/L		23007	0.054
	Zn	68		ug/L		83205	0.280
>	Ge	74		ug/L		294584	294584.269
	As	75	**9.821**	ug/L	0.693	8193	0.028
	Se	77		ug/L		2249	-0.007
	Se	82	**-0.169**	ug/L	221.806	-18	-0.000
	Kr	83		ug/L		203	0.000
	Sr	88	**95.094**	ug/L	0.843	935849	4.563
	Y	89		ug/L		496255	2.420
	Mo	98	**2.872**	ug/L	2.150	7088	0.034
	Ag	107	**0.414**	ug/L	0.719	1834	0.009
	Cd	111	**1.533**	ug/L	5.033	1748	0.008
	Cd	114		ug/L		951	0.004
>	In	115		ug/L		205043	205043.081
	Sn	120	**1.350**	ug/L	2.452	7126	0.034
	Sb	121	**0.096**	ug/L	6.682	891	0.002
	Sb	123		ug/L		718	0.002
	Ba	135		ug/L		590055	1.290
	Ba	137	**433.258**	ug/L	0.122	998386	2.182
	Ho	165		ug/L		49901	0.109
>	Lu	175		ug/L		457539	457538.853
	Tl	205	**0.796**	ug/L	2.296	16563	0.033
	Pb	208	**47.740**	ug/L	1.310	1454376	3.177
	Bi	209		ug/L		18857	0.041
	Th	232	**34.235**	ug/L	1.604	1293340	2.824
	U	238	**14.682**	ug/L	0.752	607801	1.327

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		110.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 244227006
Sample Date/Time: Saturday, January 16, 2010 00:20:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227006.297

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**38.194**	ug/L	7.420	40256	0.047
	Be	9	**2.046**	ug/L	4.388	708	0.001
	B	11	**6.224**	ug/L	2.488	2523	0.003
	Na	23	**336.278**	ug/L	2.970	1470667	1.701
	Mg	24	**3774.486**	ug/L	2.803	11588071	13.607
	Al	27	**26622.161**	ug/L	1.612	106916744	125.627
	P	31	**322.720**	ug/L	2.838	72519	0.077
	K	39	**3517.066**	ug/L	2.033	19364364	22.104
	Ca	43	**3752.419**	ug/L	4.392	43193	0.050
>	Sc	45		ug/L		850895	850894.959
	Ti	47	**725.651**	ug/L	2.343	376711	0.442
	V	51	**30.228**	ug/L	2.401	181184	0.208
	Cr	52	**18.232**	ug/L	2.058	81388	0.097
	Cr	53		ug/L		52102	-0.032
	Mn	55	**714.893**	ug/L	1.798	5558571	6.532
	Fe	57	**28797.892**	ug/L	1.196	4330913	5.085
	Co	59	**6.520**	ug/L	2.283	38418	0.045
	Ni	60	**14.570**	ug/L	2.223	18363	0.021
	Cu	63		ug/L		42929	0.050
	Cu	65	**14.633**	ug/L	2.126	21202	0.025
	Zn	66	**106.734**	ug/L	1.256	95251	0.318
	Zn	67		ug/L		18741	0.038
	Zn	68		ug/L		67370	0.222
>	Ge	74		ug/L		299405	299404.749
	As	75	**7.162**	ug/L	2.692	6044	0.021
	Se	77		ug/L		2217	-0.007
	Se	82	**0.267**	ug/L	69.115	18	0.000
	Kr	83		ug/L		148	0.000
	Sr	88	**33.831**	ug/L	0.710	339515	1.623
	Y	89		ug/L		495819	2.372
	Mo	98	**2.283**	ug/L	0.782	5766	0.027
	Ag	107	**0.218**	ug/L	1.784	1014	0.005
	Cd	111	**1.005**	ug/L	1.040	1176	0.006
	Cd	114		ug/L		885	0.004
>	In	115		ug/L		208999	208999.333
	Sn	120	**2.070**	ug/L	2.691	11002	0.051
	Sb	121	**0.148**	ug/L	5.556	1134	0.003
	Sb	123		ug/L		906	0.003
	Ba	135		ug/L		245888	0.529
	Ba	137	**185.031**	ug/L	2.333	432955	0.932
	Ho	165		ug/L		49492	0.106
>	Lu	175		ug/L		464570	464569.965
	Tl	205	**0.330**	ug/L	0.696	7930	0.014
	Pb	208	**30.169**	ug/L	0.379	933550	2.008
	Bi	209		ug/L		13257	0.028
	Th	232	**19.729**	ug/L	1.471	757369	1.628
	U	238	**13.996**	ug/L	0.916	588371	1.265

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227007
Sample Date/Time: Saturday, January 16, 2010 00:26:31
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227007.298

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**41.568**	**ug/L**	6.534	43046	0.051
	Be	9	**1.596**	**ug/L**	9.677	547	0.001
	B	11	**3.077**	**ug/L**	4.831	1387	0.001
	Na	23	**378.843**	**ug/L**	2.335	1624423	1.916
	Mg	24	**2612.290**	**ug/L**	9.334	7870741	9.417
	Al	27	**15113.768**	**ug/L**	7.452	59595855	71.320
	P	31	**298.407**	**ug/L**	3.858	66340	0.071
	K	39	**2051.708**	**ug/L**	5.772	11316511	12.895
	Ca	43	**2439.570**	**ug/L**	1.589	27677	0.033
>	Sc	45		**ug/L**		835532	835531.990
	Ti	47	**1003.715**	**ug/L**	1.330	511650	0.612
	V	51	**18.012**	**ug/L**	2.281	107555	0.124
	Cr	52	**14.619**	**ug/L**	2.947	63783	0.078
	Cr	53		**ug/L**		48910	-0.035
	Mn	55	**732.812**	**ug/L**	0.947	5595895	6.696
	Fe	57	**26888.010**	**ug/L**	2.203	3970653	4.747
	Co	59	**2.945**	**ug/L**	1.867	17146	0.020
	Ni	60	**10.604**	**ug/L**	0.804	13167	0.016
	Cu	63		**ug/L**		22877	0.027
	Cu	65	**8.288**	**ug/L**	1.363	11861	0.014
	Zn	66	**119.913**	**ug/L**	4.400	103631	0.357
	Zn	67		**ug/L**		19595	0.043
	Zn	68		**ug/L**		71694	0.245
>	Ge	74		**ug/L**		290324	290323.626
	As	75	**3.651**	**ug/L**	4.328	2934	0.010
	Se	77		**ug/L**		2126	-0.007
	Se	82	**0.425**	**ug/L**	80.445	31	0.000
	Kr	83		**ug/L**		146	0.000
	Sr	88	**17.974**	**ug/L**	3.023	178273	0.862
	Y	89		**ug/L**		639921	3.099
	Mo	98	**1.778**	**ug/L**	2.642	4457	0.021
	Ag	107	**0.201**	**ug/L**	4.135	927	0.004
	Cd	111	**0.852**	**ug/L**	10.115	988	0.005
	Cd	114		**ug/L**		315	0.001
>	In	115		**ug/L**		206462	206461.683
	Sn	120	**3.809**	**ug/L**	3.100	19787	0.095
	Sb	121	**0.044**	**ug/L**	9.188	673	0.001
	Sb	123		**ug/L**		567	0.001
	Ba	135		**ug/L**		135413	0.284
	Ba	137	**97.722**	**ug/L**	3.881	234840	0.492
	Ho	165		**ug/L**		66240	0.139
>	Lu	175		**ug/L**		477380	477379.984
	Tl	205	**0.117**	**ug/L**	4.619	3967	0.005
	Pb	208	**9.423**	**ug/L**	2.532	299994	0.627
	Bi	209		**ug/L**		2518	0.005
	Th	232	**19.610**	**ug/L**	3.951	772991	1.618
	U	238	**2.236**	**ug/L**	2.890	97266	0.202

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		105.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227008
Sample Date/Time: Saturday, January 16, 2010 00:32:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227008.299

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**39.501**	ug/L	4.938	42254	0.049
	Be	9	**2.797**	ug/L	4.745	974	0.001
	B	11	**14.338**	ug/L	1.864	5464	0.006
	Na	23	**451.242**	ug/L	8.205	1993308	2.283
	Mg	24	**6303.203**	ug/L	3.747	19618355	22.723
	Al	27	**37728.351**	ug/L	3.847	153703938	178.036
	P	31	**674.246**	ug/L	2.379	146142	0.161
	K	39	**6923.927**	ug/L	9.062	38100033	43.516
	Ca	43	**17953.034**	ug/L	0.743	208687	0.241
>	Sc	45		ug/L		863215	863215.484
	Ti	47	**691.408**	ug/L	0.246	364237	0.422
	V	51	**43.341**	ug/L	1.404	261896	0.299
	Cr	52	**27.635**	ug/L	1.537	125987	0.148
	Cr	53		ug/L		57407	-0.027
	Mn	55	**1251.910**	ug/L	0.541	9875633	11.439
	Fe	57	**32795.508**	ug/L	1.456	5002948	5.790
	Co	59	**11.853**	ug/L	0.902	70706	0.082
	Ni	60	**23.419**	ug/L	0.446	29859	0.034
	Cu	63		ug/L		91670	0.106
	Cu	65	**30.577**	ug/L	1.853	44773	0.052
	Zn	66	**163.440**	ug/L	1.468	145908	0.486
	Zn	67		ug/L		27833	0.069
	Zn	68		ug/L		106651	0.353
>	Ge	74		ug/L		299728	299727.881
	As	75	**9.684**	ug/L	3.533	8220	0.028
	Se	77		ug/L		2492	-0.006
	Se	82	**0.513**	ug/L	39.261	39	0.000
	Kr	83		ug/L		167	0.000
	Sr	88	**125.456**	ug/L	1.962	1260283	6.020
	Y	89		ug/L		628635	3.003
	Mo	98	**2.353**	ug/L	2.625	5947	0.028
	Ag	107	**0.357**	ug/L	4.383	1620	0.007
	Cd	111	**1.989**	ug/L	3.491	2308	0.011
	Cd	114		ug/L		3364	0.016
>	In	115		ug/L		209380	209380.199
	Sn	120	**1.492**	ug/L	1.605	8016	0.037
	Sb	121	**0.184**	ug/L	3.175	1297	0.004
	Sb	123		ug/L		1024	0.003
	Ba	135		ug/L		717350	1.537
	Ba	137	**510.437**	ug/L	2.430	1199915	2.571
	Ho	165		ug/L		62193	0.133
>	Lu	175		ug/L		466832	466832.181
	Tl	205	**0.522**	ug/L	1.631	11640	0.021
	Pb	208	**65.558**	ug/L	1.727	2037414	4.363
	Bi	209		ug/L		24630	0.052
	Th	232	**23.605**	ug/L	0.192	910330	1.947
	U	238	**32.654**	ug/L	1.537	1378156	2.951

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		109.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		103.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, January 16, 2010 00:38:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 8.300

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.664**	**ug/L**	6.398	50106	0.060
	Be	9	**48.110**	**ug/L**	3.442	15832	0.019
	B	11	**92.396**	**ug/L**	1.204	32157	0.038
	Na	23	**4563.040**	**ug/L**	6.170	19200968	23.082
	Mg	24	**4881.835**	**ug/L**	1.960	14630006	17.599
	Al	27	**5448.641**	**ug/L**	9.293	21367227	25.712
	P	31	**5130.897**	**ug/L**	0.447	1025835	1.227
	K	39	**4566.796**	**ug/L**	2.486	24391143	28.701
	Ca	43	**4966.567**	**ug/L**	1.472	55768	0.067
>	Sc	45		**ug/L**		830908	830907.693
	Ti	47	**49.683**	**ug/L**	2.063	25477	0.030
	V	51	**50.004**	**ug/L**	1.384	290271	0.345
	Cr	52	**50.939**	**ug/L**	1.220	224758	0.272
	Cr	53		**ug/L**		93966	0.020
	Mn	55	**51.053**	**ug/L**	1.476	389171	0.466
	Fe	57	**5051.780**	**ug/L**	0.369	746005	0.892
	Co	59	**49.377**	**ug/L**	1.972	282923	0.340
	Ni	60	**51.354**	**ug/L**	0.768	62853	0.075
	Cu	63		**ug/L**		147007	0.177
	Cu	65	**50.276**	**ug/L**	1.767	70770	0.085
	Zn	66	**52.045**	**ug/L**	1.525	47792	0.155
	Zn	67		**ug/L**		13650	0.020
	Zn	68		**ug/L**		33617	0.107
>	Ge	74		**ug/L**		307458	307458.016
	As	75	**49.554**	**ug/L**	0.846	43578	0.142
	Se	77		**ug/L**		7353	0.010
	Se	82	**50.571**	**ug/L**	4.003	4416	0.014
	Kr	83		**ug/L**		85	-0.000
	Sr	88	**53.345**	**ug/L**	0.674	530797	2.560
	Y	89		**ug/L**		99	0.000
	Mo	98	**50.312**	**ug/L**	1.196	123813	0.597
	Ag	107	**51.882**	**ug/L**	0.345	225371	1.087
	Cd	111	**51.606**	**ug/L**	1.299	58678	0.283
	Cd	114		**ug/L**		145435	0.701
>	In	115		**ug/L**		207280	207279.647
	Sn	120	**51.569**	**ug/L**	0.469	265854	1.281
	Sb	121	**52.209**	**ug/L**	1.229	227406	1.095
	Sb	123		**ug/L**		176202	0.848
	Ba	135		**ug/L**		66430	0.146
	Ba	137	**50.596**	**ug/L**	0.929	115590	0.255
	Ho	165		**ug/L**		43	0.000
>	Lu	175		**ug/L**		453406	453406.337
	Tl	205	**53.577**	**ug/L**	1.901	999604	2.201
	Pb	208	**54.034**	**ug/L**	0.370	1631317	3.596
	Bi	209		**ug/L**		477	0.001
	Th	232	**52.063**	**ug/L**	1.168	1948440	4.295
	U	238	**53.317**	**ug/L**	1.643	2184987	4.818

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	97.329				
	Be	9	96.221				
	B	11	92.396				
	Na	23	91.261				
	Mg	24	97.637				
	Al	27	107.894				
	P	31	102.618				
	K	39	91.336				
	Ca	43	99.331				
>	Sc	45		105.3			
	Ti	47	99.366				
	V	51	100.008				
	Cr	52	101.879				
	Cr	53					
	Mn	55	102.106				
	Fe	57	101.036				
	Co	59	98.755				
	Ni	60	102.708				
	Cu	63					
	Cu	65	100.553				
	Zn	66	104.089				
	Zn	67					
	Zn	68					
>	Ge	74		102.8			
	As	75	99.108				
	Se	77					
	Se	82	101.141				
	Kr	83					
	Sr	88	106.689				
	Y	89					
	Mo	98	100.624				
	Ag	107	103.763				
	Cd	111	103.212				
	Cd	114					
>	In	115		99.1			
	Sn	120	103.138				
	Sb	121	104.419				
	Sb	123					
	Ba	135					
	Ba	137	101.192				
	Ho	165					
>	Lu	175		100.3			
	Tl	205	107.153				
	Pb	208	108.069				
	Bi	209					
	Th	232	104.127				
	U	238	106.634				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, January 16, 2010 00:44:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 9.301

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.027**	ug/L	24.628	82	0.000
	Be	9	**-0.013**	ug/L	59.948	14	-0.000
	B	11	**2.421**	ug/L	31.472	1127	0.001
	Na	23	**1.033**	ug/L	83.518	27026	0.005
	Mg	24	**-0.642**	ug/L	53.033	5001	-0.002
	Al	27	**0.186**	ug/L	599.988	9003	0.001
	P	31	**0.763**	ug/L	182.531	6739	0.000
	K	39	**3.513**	ug/L	240.020	549392	0.022
	Ca	43	**-2.115**	ug/L	75.366	239	-0.000
>	Sc	45		ug/L		814469	814469.371
	Ti	47	**-0.006**	ug/L	303.874	296	-0.000
	V	51	**0.158**	ug/L	297.226	4565	0.001
	Cr	52	**0.076**	ug/L	29.497	-1118	0.000
	Cr	53		ug/L		69497	-0.008
	Mn	55	**0.019**	ug/L	28.461	1664	0.000
	Fe	57	**1.468**	ug/L	30.812	4986	0.000
	Co	59	**0.002**	ug/L	226.927	200	0.000
	Ni	60	**-0.006**	ug/L	152.789	134	-0.000
	Cu	63		ug/L		219	-0.000
	Cu	65	**-0.016**	ug/L	54.009	131	-0.000
	Zn	66	**0.005**	ug/L	157.151	197	0.000
	Zn	67		ug/L		6660	-0.002
	Zn	68		ug/L		746	-0.000
>	Ge	74		ug/L		305094	305093.623
	As	75	**-0.230**	ug/L	30.504	-308	-0.001
	Se	77		ug/L		4227	-0.000
	Se	82	**0.105**	ug/L	62.031	5	0.000
	Kr	83		ug/L		79	-0.000
	Sr	88	**0.002**	ug/L	97.518	237	0.000
	Y	89		ug/L		44	-0.000
	Mo	98	**0.022**	ug/L	41.260	159	0.000
	Ag	107	**0.003**	ug/L	113.221	68	0.000
	Cd	111	**0.001**	ug/L	1352.498	25	0.000
	Cd	114		ug/L		61	0.000
>	In	115		ug/L		208368	208367.859
	Sn	120	**0.063**	ug/L	22.906	578	0.002
	Sb	121	**0.286**	ug/L	39.077	1731	0.006
	Sb	123		ug/L		1399	0.005
	Ba	135		ug/L		58	0.000
	Ba	137	**0.011**	ug/L	44.129	90	0.000
	Ho	165		ug/L		21	0.000
>	Lu	175		ug/L		459630	459629.852
	Tl	205	**0.193**	ug/L	30.109	5246	0.008
	Pb	208	**0.004**	ug/L	15.249	829	0.000
	Bi	209		ug/L		144	-0.000
	Th	232	**0.055**	ug/L	33.038	3346	0.005
	U	238	**0.009**	ug/L	12.752	1197	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		102.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227009
Sample Date/Time: Saturday, January 16, 2010 00:51:10
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227009.302

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**44.899**	**ug/L**	5.105	47432	0.056
	Be	9	**2.583**	**ug/L**	2.972	890	0.001
	B	11	**10.316**	**ug/L**	0.756	3973	0.004
	Na	23	**399.423**	**ug/L**	3.958	1745195	2.020
	Mg	24	**5761.059**	**ug/L**	4.847	17701191	20.768
	Al	27	**45075.502**	**ug/L**	6.077	181278139	212.706
	P	31	**539.450**	**ug/L**	1.421	116777	0.129
	K	39	**5514.565**	**ug/L**	4.649	30088344	34.658
	Ca	43	**6792.264**	**ug/L**	1.362	78112	0.091
>	Sc	45		**ug/L**		852126	852125.651
	Ti	47	**960.929**	**ug/L**	0.803	499612	0.586
	V	51	**49.507**	**ug/L**	1.478	294758	0.341
	Cr	52	**33.831**	**ug/L**	1.642	152570	0.181
	Cr	53		**ug/L**		61817	-0.021
	Mn	55	**1044.629**	**ug/L**	2.904	8134224	9.545
	Fe	57	**34474.414**	**ug/L**	2.128	5191400	6.087
	Co	59	**15.235**	**ug/L**	2.526	89652	0.105
	Ni	60	**25.158**	**ug/L**	0.701	31655	0.037
	Cu	63		**ug/L**		75166	0.088
	Cu	65	**25.429**	**ug/L**	1.266	36786	0.043
	Zn	66	**109.440**	**ug/L**	0.529	95433	0.326
	Zn	67		**ug/L**		19868	0.044
	Zn	68		**ug/L**		70116	0.237
>	Ge	74		**ug/L**		292550	292550.419
	As	75	**8.663**	**ug/L**	3.490	7166	0.025
	Se	77		**ug/L**		2319	-0.006
	Se	82	**0.051**	**ug/L**	416.670	-0	0.000
	Kr	83		**ug/L**		162	0.000
	Sr	88	**67.427**	**ug/L**	1.071	671047	3.236
	Y	89		**ug/L**		448020	2.161
	Mo	98	**2.609**	**ug/L**	1.682	6520	0.031
	Ag	107	**0.329**	**ug/L**	1.167	1486	0.007
	Cd	111	**1.398**	**ug/L**	8.057	1615	0.008
	Cd	114		**ug/L**		1518	0.007
>	In	115		**ug/L**		207351	207351.340
	Sn	120	**1.342**	**ug/L**	3.654	7163	0.033
	Sb	121	**0.241**	**ug/L**	5.373	1530	0.005
	Sb	123		**ug/L**		1253	0.004
	Ba	135		**ug/L**		480955	1.045
	Ba	137	**350.644**	**ug/L**	2.787	812310	1.766
	Ho	165		**ug/L**		44607	0.097
>	Lu	175		**ug/L**		460073	460073.306
	Tl	205	**0.663**	**ug/L**	0.565	14144	0.027
	Pb	208	**50.724**	**ug/L**	1.502	1553735	3.376
	Bi	209		**ug/L**		19794	0.043
	Th	232	**26.893**	**ug/L**	2.394	1021750	2.219
	U	238	**22.206**	**ug/L**	1.166	923892	2.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		108.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 244227010
Sample Date/Time: Saturday, January 16, 2010 00:57:22
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227010.303

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**47.692**	**ug/L**	7.004	50027	0.059
	Be	9	**1.942**	**ug/L**	6.467	670	0.001
	B	11	**7.241**	**ug/L**	5.323	2868	0.003
	Na	23	**453.802**	**ug/L**	8.872	1966097	2.296
	Mg	24	**4404.253**	**ug/L**	4.142	13452054	15.877
	Al	27	**25951.999**	**ug/L**	0.889	103714578	122.465
	P	31	**629.013**	**ug/L**	1.948	134171	0.150
	K	39	**4049.740**	**ug/L**	3.708	22101691	25.452
	Ca	43	**5933.831**	**ug/L**	1.544	67851	0.080
>	Sc	45		**ug/L**		846885	846885.496
	Ti	47	**967.816**	**ug/L**	1.073	500039	0.590
	V	51	**40.019**	**ug/L**	1.677	237518	0.276
	Cr	52	**21.358**	**ug/L**	1.437	95169	0.114
	Cr	53		**ug/L**		53078	-0.031
	Mn	55	**723.941**	**ug/L**	1.591	5603304	6.615
	Fe	57	**33995.969**	**ug/L**	0.987	5087924	6.002
	Co	59	**7.399**	**ug/L**	0.304	43380	0.051
	Ni	60	**15.951**	**ug/L**	1.212	20002	0.023
	Cu	63		**ug/L**		47855	0.056
	Cu	65	**16.654**	**ug/L**	1.241	23997	0.028
	Zn	66	**139.886**	**ug/L**	0.565	124364	0.416
	Zn	67		**ug/L**		23152	0.053
	Zn	68		**ug/L**		86988	0.289
>	Ge	74		**ug/L**		298393	298392.808
	As	75	**7.094**	**ug/L**	3.492	5965	0.020
	Se	77		**ug/L**		2228	-0.007
	Se	82	**0.360**	**ug/L**	14.155	26	0.000
	Kr	83		**ug/L**		138	0.000
	Sr	88	**47.156**	**ug/L**	1.159	471737	2.263
	Y	89		**ug/L**		479299	2.300
	Mo	98	**3.225**	**ug/L**	3.185	8077	0.038
	Ag	107	**0.228**	**ug/L**	4.352	1052	0.005
	Cd	111	**1.051**	**ug/L**	5.130	1226	0.006
	Cd	114		**ug/L**		1098	0.005
>	In	115		**ug/L**		208390	208390.254
	Sn	120	**2.504**	**ug/L**	1.066	13217	0.062
	Sb	121	**0.161**	**ug/L**	3.131	1188	0.003
	Sb	123		**ug/L**		950	0.003
	Ba	135		**ug/L**		248877	0.536
	Ba	137	**184.552**	**ug/L**	1.158	431173	0.929
	Ho	165		**ug/L**		46180	0.100
>	Lu	175		**ug/L**		463843	463842.550
	Tl	205	**0.343**	**ug/L**	2.002	8157	0.014
	Pb	208	**36.701**	**ug/L**	1.077	1133721	2.443
	Bi	209		**ug/L**		12007	0.026
	Th	232	**18.639**	**ug/L**	1.749	714453	1.538
	U	238	**14.190**	**ug/L**	0.625	595592	1.282

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.6			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227011
Sample Date/Time: Saturday, January 16, 2010 01:03:35
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227011.304

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**29.279**	**ug/L**	7.097	29751	0.036
	Be	9	**0.967**	**ug/L**	2.952	332	0.000
	B	11	**3.952**	**ug/L**	3.493	1657	0.002
	Na	23	**324.305**	**ug/L**	5.489	1366085	1.640
	Mg	24	**2345.073**	**ug/L**	11.893	6926784	8.454
	Al	27	**16064.297**	**ug/L**	7.137	62086429	75.806
	P	31	**300.127**	**ug/L**	1.372	65385	0.072
	K	39	**2406.667**	**ug/L**	6.535	12918849	15.125
	Ca	43	**2370.488**	**ug/L**	1.940	26372	0.032
>	Sc	45		**ug/L**		819042	819042.171
	Ti	47	**519.237**	**ug/L**	1.064	259595	0.317
	V	51	**17.163**	**ug/L**	2.990	100641	0.118
	Cr	52	**9.872**	**ug/L**	2.339	41757	0.053
	Cr	53		**ug/L**		44930	-0.039
	Mn	55	**446.881**	**ug/L**	0.728	3345744	4.083
	Fe	57	**15974.518**	**ug/L**	2.060	2314547	2.821
	Co	59	**4.106**	**ug/L**	1.913	23359	0.028
	Ni	60	**7.422**	**ug/L**	4.579	9074	0.011
	Cu	63		**ug/L**		22813	0.028
	Cu	65	**8.064**	**ug/L**	1.365	11318	0.014
	Zn	66	**65.610**	**ug/L**	0.617	58108	0.195
	Zn	67		**ug/L**		12884	0.019
	Zn	68		**ug/L**		41705	0.138
>	Ge	74		**ug/L**		296746	296745.671
	As	75	**3.679**	**ug/L**	4.121	3027	0.011
	Se	77		**ug/L**		2023	-0.008
	Se	82	**0.061**	**ug/L**	374.275	1	0.000
	Kr	83		**ug/L**		107	0.000
	Sr	88	**26.639**	**ug/L**	1.720	264668	1.278
	Y	89		**ug/L**		258994	1.252
	Mo	98	**1.207**	**ug/L**	1.415	3065	0.014
	Ag	107	**0.118**	**ug/L**	3.089	566	0.002
	Cd	111	**0.556**	**ug/L**	7.269	655	0.003
	Cd	114		**ug/L**		617	0.003
>	In	115		**ug/L**		206895	206895.059
	Sn	120	**1.545**	**ug/L**	0.724	8192	0.038
	Sb	121	**0.063**	**ug/L**	10.688	756	0.001
	Sb	123		**ug/L**		620	0.001
	Ba	135		**ug/L**		130393	0.281
	Ba	137	**97.014**	**ug/L**	1.258	226586	0.489
	Ho	165		**ug/L**		25224	0.054
>	Lu	175		**ug/L**		463705	463704.934
	Tl	205	**0.167**	**ug/L**	2.919	4810	0.007
	Pb	208	**18.328**	**ug/L**	1.380	566286	1.220
	Bi	209		**ug/L**		7283	0.015
	Th	232	**10.300**	**ug/L**	0.287	395270	0.850
	U	238	**6.458**	**ug/L**	1.544	271416	0.584

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		103.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227012
Sample Date/Time: Saturday, January 16, 2010 01:09:46
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227012.305

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.651**	**ug/L**	7.204	48988	0.058
	Be	9	**3.274**	**ug/L**	6.596	1117	0.001
	B	11	**11.176**	**ug/L**	3.175	4255	0.005
	Na	23	**426.206**	**ug/L**	7.305	1851278	2.156
	Mg	24	**7577.891**	**ug/L**	9.316	23144234	27.318
	Al	27	**58416.918**	**ug/L**	7.367	233580174	275.663
	P	31	**610.432**	**ug/L**	1.798	130592	0.146
	K	39	**7208.144**	**ug/L**	7.284	38990221	45.302
	Ca	43	**9484.538**	**ug/L**	1.052	108446	0.128
>	Sc	45		**ug/L**		848102	848102.027
	Ti	47	**1167.213**	**ug/L**	1.490	603800	0.712
	V	51	**64.247**	**ug/L**	1.279	379504	0.443
	Cr	52	**31.507**	**ug/L**	2.710	141292	0.168
	Cr	53		**ug/L**		56910	-0.026
	Mn	55	**1547.018**	**ug/L**	1.631	11987126	14.135
	Fe	57	**37653.124**	**ug/L**	1.279	5642495	6.648
	Co	59	**21.587**	**ug/L**	0.880	126357	0.149
	Ni	60	**27.876**	**ug/L**	2.502	34882	0.041
	Cu	63		**ug/L**		64396	0.076
	Cu	65	**21.938**	**ug/L**	0.670	31611	0.037
	Zn	66	**97.975**	**ug/L**	1.277	85809	0.291
	Zn	67		**ug/L**		19502	0.042
	Zn	68		**ug/L**		67189	0.226
>	Ge	74		**ug/L**		293809	293808.766
	As	75	**8.588**	**ug/L**	4.882	7130	0.025
	Se	77		**ug/L**		2216	-0.007
	Se	82	**-0.111**	**ug/L**	173.109	-13	-0.000
	Kr	83		**ug/L**		166	0.000
	Sr	88	**118.480**	**ug/L**	0.357	1158224	5.685
	Y	89		**ug/L**		424696	2.085
	Mo	98	**1.468**	**ug/L**	1.864	3649	0.017
	Ag	107	**0.293**	**ug/L**	5.527	1305	0.006
	Cd	111	**1.138**	**ug/L**	5.947	1294	0.006
	Cd	114		**ug/L**		914	0.004
>	In	115		**ug/L**		203689	203688.694
	Sn	120	**0.637**	**ug/L**	0.827	3469	0.016
	Sb	121	**0.057**	**ug/L**	9.841	719	0.001
	Sb	123		**ug/L**		583	0.001
	Ba	135		**ug/L**		861837	1.862
	Ba	137	**616.041**	**ug/L**	1.161	1436356	3.102
	Ho	165		**ug/L**		41030	0.089
>	Lu	175		**ug/L**		463009	463009.311
	Tl	205	**0.817**	**ug/L**	0.628	17164	0.034
	Pb	208	**53.038**	**ug/L**	2.635	1634640	3.530
	Bi	209		**ug/L**		21798	0.047
	Th	232	**32.567**	**ug/L**	1.368	1244974	2.687
	U	238	**4.845**	**ug/L**	2.127	203514	0.438

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		98.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		102.5			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 244227013
Sample Date/Time: Saturday, January 16, 2010 01:15:57
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227013.306

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**76.378**	**ug/L**	6.885	83289	0.095
	Be	9	**3.714**	**ug/L**	4.397	1314	0.001
	B	11	**14.277**	**ug/L**	3.623	5552	0.006
	Na	23	**509.202**	**ug/L**	4.759	2292116	2.576
	Mg	24	**9914.911**	**ug/L**	0.428	31482965	35.742
	Al	27	**71878.415**	**ug/L**	1.132	298690870	339.186
	P	31	**525.116**	**ug/L**	1.731	117673	0.126
	K	39	**9323.604**	**ug/L**	4.151	52164999	58.597
	Ca	43	**7731.228**	**ug/L**	1.569	91842	0.104
>	Sc	45		**ug/L**		880636	880635.763
	Ti	47	**947.783**	**ug/L**	0.627	509237	0.578
	V	51	**66.414**	**ug/L**	1.553	407266	0.458
	Cr	52	**45.007**	**ug/L**	0.309	210289	0.241
	Cr	53		**ug/L**		65572	-0.019
	Mn	55	**637.494**	**ug/L**	1.161	5130832	5.825
	Fe	57	**51859.500**	**ug/L**	1.918	8067610	9.157
	Co	59	**14.282**	**ug/L**	1.709	86870	0.098
	Ni	60	**30.924**	**ug/L**	0.343	40175	0.045
	Cu	63		**ug/L**		79130	0.090
	Cu	65	**25.893**	**ug/L**	1.707	38711	0.044
	Zn	66	**139.065**	**ug/L**	0.205	122778	0.414
	Zn	67		**ug/L**		23837	0.056
	Zn	68		**ug/L**		88795	0.297
>	Ge	74		**ug/L**		296319	296318.910
	As	75	**8.118**	**ug/L**	2.194	6795	0.023
	Se	77		**ug/L**		2226	-0.007
	Se	82	**-0.463**	**ug/L**	60.445	-43	-0.000
	Kr	83		**ug/L**		233	0.001
	Sr	88	**90.487**	**ug/L**	1.165	891436	4.342
	Y	89		**ug/L**		552741	2.693
	Mo	98	**2.096**	**ug/L**	2.323	5206	0.025
	Ag	107	**0.529**	**ug/L**	1.297	2330	0.011
	Cd	111	**1.536**	**ug/L**	12.167	1753	0.008
	Cd	114		**ug/L**		456	0.002
>	In	115		**ug/L**		205243	205243.447
	Sn	120	**1.484**	**ug/L**	1.842	7816	0.037
	Sb	121	**0.052**	**ug/L**	15.687	702	0.001
	Sb	123		**ug/L**		557	0.001
	Ba	135		**ug/L**		460666	1.003
	Ba	137	**337.206**	**ug/L**	1.910	779615	1.698
	Ho	165		**ug/L**		56204	0.122
>	Lu	175		**ug/L**		459102	459102.250
	Tl	205	**0.798**	**ug/L**	1.060	16657	0.033
	Pb	208	**34.553**	**ug/L**	0.313	1056499	2.300
	Bi	209		**ug/L**		14831	0.032
	Th	232	**32.515**	**ug/L**	0.756	1232632	2.682
	U	238	**3.348**	**ug/L**	0.421	139716	0.302

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		111.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		101.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 244227014
Sample Date/Time: Saturday, January 16, 2010 01:22:08
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227014.307

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**37.712**	**ug/L**	7.542	40138	0.047
	Be	9	**3.003**	**ug/L**	9.100	1040	0.001
	B	11	**7.322**	**ug/L**	0.835	2938	0.003
	Na	23	**485.088**	**ug/L**	11.513	2129576	2.454
	Mg	24	**4633.033**	**ug/L**	3.306	14348149	16.702
	Al	27	**32552.480**	**ug/L**	10.676	131822474	153.612
	P	31	**433.698**	**ug/L**	4.400	95964	0.104
	K	39	**3920.001**	**ug/L**	1.011	21720580	24.636
	Ca	43	**5116.121**	**ug/L**	0.438	59371	0.069
>	Sc	45		**ug/L**		858895	858894.669
	Ti	47	**986.962**	**ug/L**	0.729	517174	0.602
	V	51	**47.867**	**ug/L**	2.066	287354	0.330
	Cr	52	**20.705**	**ug/L**	2.030	93518	0.111
	Cr	53		**ug/L**		51668	-0.033
	Mn	55	**723.808**	**ug/L**	0.968	5681484	6.614
	Fe	57	**42185.119**	**ug/L**	0.376	6402188	7.448
	Co	59	**7.225**	**ug/L**	2.520	42956	0.050
	Ni	60	**15.057**	**ug/L**	1.279	19153	0.022
	Cu	63		**ug/L**		45600	0.053
	Cu	65	**15.725**	**ug/L**	2.193	22988	0.027
	Zn	66	**128.869**	**ug/L**	0.805	113955	0.383
	Zn	67		**ug/L**		21551	0.048
	Zn	68		**ug/L**		79730	0.266
>	Ge	74		**ug/L**		296762	296762.405
	As	75	**9.567**	**ug/L**	5.554	8036	0.027
	Se	77		**ug/L**		2221	-0.007
	Se	82	**0.507**	**ug/L**	19.905	38	0.000
	Kr	83		**ug/L**		181	0.000
	Sr	88	**47.146**	**ug/L**	0.572	465538	2.262
	Y	89		**ug/L**		695762	3.382
	Mo	98	**3.963**	**ug/L**	0.238	9771	0.047
	Ag	107	**0.271**	**ug/L**	4.458	1226	0.006
	Cd	111	**0.907**	**ug/L**	2.592	1047	0.005
	Cd	114		**ug/L**		379	0.002
>	In	115		**ug/L**		205683	205682.755
	Sn	120	**2.044**	**ug/L**	2.940	10695	0.051
	Sb	121	**0.126**	**ug/L**	6.286	1025	0.003
	Sb	123		**ug/L**		841	0.002
	Ba	135		**ug/L**		274748	0.584
	Ba	137	**199.374**	**ug/L**	1.329	472508	1.004
	Ho	165		**ug/L**		65490	0.139
>	Lu	175		**ug/L**		470566	470565.692
	Tl	205	**0.337**	**ug/L**	0.595	8162	0.014
	Pb	208	**25.903**	**ug/L**	2.216	811845	1.724
	Bi	209		**ug/L**		8981	0.019
	Th	232	**23.142**	**ug/L**	1.945	899478	1.909
	U	238	**2.614**	**ug/L**	1.227	112020	0.236

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		108.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		104.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 244227015
Sample Date/Time: Saturday, January 16, 2010 01:28:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940132|2|baj
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\244227015.308

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.561**	ug/L	6.967	51003	0.060
	Be	9	**2.380**	ug/L	4.093	817	0.001
	B	11	**8.982**	ug/L	2.754	3483	0.004
	Na	23	**672.165**	ug/L	21.395	2901746	3.400
	Mg	24	**5730.680**	ug/L	5.549	17515059	20.659
	Al	27	**45052.305**	ug/L	2.057	180210751	212.597
	P	31	**292.017**	ug/L	0.193	66038	0.070
	K	39	**6109.213**	ug/L	6.199	33114982	38.395
	Ca	43	**4442.569**	ug/L	1.319	50922	0.060
>	Sc	45		ug/L		847726	847725.642
	Ti	47	**1072.573**	ug/L	0.864	554706	0.654
	V	51	**46.144**	ug/L	3.585	273522	0.318
	Cr	52	**33.611**	ug/L	2.102	150773	0.180
	Cr	53		ug/L		56419	-0.027
	Mn	55	**1086.677**	ug/L	0.637	8418661	9.929
	Fe	57	**33886.909**	ug/L	1.636	5076529	5.983
	Co	59	**17.380**	ug/L	1.506	101721	0.120
	Ni	60	**26.378**	ug/L	2.361	33006	0.039
	Cu	63		ug/L		75546	0.089
	Cu	65	**25.778**	ug/L	0.073	37098	0.044
	Zn	66	**96.727**	ug/L	1.285	84377	0.288
	Zn	67		ug/L		17738	0.036
	Zn	68		ug/L		62504	0.211
>	Ge	74		ug/L		292605	292604.963
	As	75	**5.710**	ug/L	4.476	4688	0.016
	Se	77		ug/L		2064	-0.007
	Se	82	**-0.043**	ug/L	385.799	-8	-0.000
	Kr	83		ug/L		172	0.000
	Sr	88	**58.336**	ug/L	0.936	573504	2.799
	Y	89		ug/L		440871	2.153
	Mo	98	**2.067**	ug/L	1.545	5125	0.025
	Ag	107	**0.349**	ug/L	1.017	1552	0.007
	Cd	111	**1.170**	ug/L	9.002	1339	0.006
	Cd	114		ug/L		437	0.002
>	In	115		ug/L		204823	204823.463
	Sn	120	**1.812**	ug/L	2.156	9469	0.045
	Sb	121	**0.101**	ug/L	4.397	909	0.002
	Sb	123		ug/L		750	0.002
	Ba	135		ug/L		463439	0.996
	Ba	137	**339.368**	ug/L	1.800	795392	1.709
	Ho	165		ug/L		44707	0.096
>	Lu	175		ug/L		465371	465370.567
	Tl	205	**0.571**	ug/L	4.039	12539	0.023
	Pb	208	**32.727**	ug/L	1.006	1014331	2.178
	Bi	209		ug/L		11898	0.025
	Th	232	**29.431**	ug/L	2.859	1130892	2.428
	U	238	**3.464**	ug/L	1.196	146524	0.313

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		107.5			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		103.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, January 16, 2010 01:34:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 6.309

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.624**	ug/L	6.306	50219	0.064
	Be	9	**52.454**	ug/L	4.426	16307	0.021
	B	11	**100.914**	ug/L	2.033	33153	0.042
	Na	23	**4957.368**	ug/L	17.206	19702593	25.077
	Mg	24	**4931.369**	ug/L	3.839	13962589	17.777
	Al	27	**5189.291**	ug/L	3.148	19229670	24.488
	P	31	**5215.899**	ug/L	0.693	985100	1.247
	K	39	**4731.743**	ug/L	1.147	23857030	29.738
	Ca	43	**5029.370**	ug/L	2.712	53350	0.068
>	Sc	45		ug/L		784990	784990.406
	Ti	47	**50.141**	ug/L	1.769	24288	0.031
	V	51	**50.725**	ug/L	3.291	278128	0.350
	Cr	52	**51.960**	ug/L	1.119	216622	0.278
	Cr	53		ug/L		86349	0.017
	Mn	55	**52.227**	ug/L	0.274	376076	0.477
	Fe	57	**5233.004**	ug/L	1.544	729904	0.924
	Co	59	**50.798**	ug/L	2.518	274976	0.350
	Ni	60	**52.637**	ug/L	0.527	60861	0.077
	Cu	63		ug/L		140274	0.178
	Cu	65	**50.424**	ug/L	1.357	67054	0.085
	Zn	66	**52.070**	ug/L	1.987	46026	0.155
	Zn	67		ug/L		12919	0.020
	Zn	68		ug/L		32107	0.106
>	Ge	74		ug/L		295932	295931.682
	As	75	**48.883**	ug/L	1.327	41376	0.140
	Se	77		ug/L		6653	0.008
	Se	82	**49.026**	ug/L	1.624	4121	0.014
	Kr	83		ug/L		83	-0.000
	Sr	88	**52.973**	ug/L	0.425	515782	2.542
	Y	89		ug/L		115	0.000
	Mo	98	**49.860**	ug/L	1.828	120054	0.591
	Ag	107	**51.335**	ug/L	0.651	218207	1.076
	Cd	111	**51.606**	ug/L	2.817	57406	0.283
	Cd	114		ug/L		141123	0.696
>	In	115		ug/L		202835	202835.478
	Sn	120	**51.528**	ug/L	2.152	259898	1.280
	Sb	121	**52.301**	ug/L	2.085	222863	1.097
	Sb	123		ug/L		173337	0.853
	Ba	135		ug/L		64784	0.142
	Ba	137	**49.617**	ug/L	1.692	113819	0.250
	Ho	165		ug/L		48	0.000
>	Lu	175		ug/L		455285	455284.691
	Tl	205	**52.616**	ug/L	0.837	985833	2.162
	Pb	208	**53.453**	ug/L	0.836	1620454	3.558
	Bi	209		ug/L		457	0.001
	Th	232	**51.469**	ug/L	2.342	1934161	4.246
	U	238	**52.870**	ug/L	1.433	2175715	4.777

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	103.248				
	Be	9	104.909				
	B	11	100.914				
	Na	23	99.147				
	Mg	24	98.627				
	Al	27	102.758				
	P	31	104.318				
	K	39	94.635				
	Ca	43	100.587				
>	Sc	45		99.5			
	Ti	47	100.282				
	V	51	101.450				
	Cr	52	103.920				
	Cr	53					
	Mn	55	104.455				
	Fe	57	104.660				
	Co	59	101.596				
	Ni	60	105.274				
	Cu	63					
	Cu	65	100.848				
	Zn	66	104.140				
	Zn	67					
	Zn	68					
>	Ge	74		98.9			
	As	75	97.767				
	Se	77					
	Se	82	98.052				
	Kr	83					
	Sr	88	105.946				
	Y	89					
	Mo	98	99.721				
	Ag	107	102.669				
	Cd	111	103.212				
	Cd	114					
>	In	115		97.0			
	Sn	120	103.057				
	Sb	121	104.601				
	Sb	123					
	Ba	135					
	Ba	137	99.235				
	Ho	165					
>	Lu	175		100.7			
	Tl	205	105.232				
	Pb	208	106.907				
	Bi	209					
	Th	232	102.939				
	U	238	105.740				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, January 16, 2010 01:40:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 2.mth
Dataset File: c:\elandata\Dataset\100114\QC Std 7.310

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.026**	**ug/L**	48.627	76	0.000
	Be	9	**-0.013**	**ug/L**	103.522	14	-0.000
	B	11	**2.415**	**ug/L**	27.897	1073	0.001
	Na	23	**0.952**	**ug/L**	64.754	25356	0.005
	Mg	24	**-0.553**	**ug/L**	66.901	5001	-0.002
	Al	27	**0.860**	**ug/L**	29.601	11004	0.004
	P	31	**0.211**	**ug/L**	539.858	6308	0.000
	K	39	**0.302**	**ug/L**	2037.555	507196	0.002
	Ca	43	**-4.802**	**ug/L**	56.349	199	-0.000
>	Sc	45		**ug/L**		774574	774574.274
	Ti	47	**0.019**	**ug/L**	252.435	293	0.000
	V	51	**-0.316**	**ug/L**	74.218	1840	-0.002
	Cr	52	**0.090**	**ug/L**	14.419	-1005	0.000
	Cr	53		**ug/L**		63312	-0.012
	Mn	55	**0.124**	**ug/L**	10.775	2326	0.001
	Fe	57	**1.295**	**ug/L**	92.942	4719	0.000
	Co	59	**-0.000**	**ug/L**	966.741	177	-0.000
	Ni	60	**-0.015**	**ug/L**	75.170	118	-0.000
	Cu	63		**ug/L**		213	-0.000
	Cu	65	**-0.008**	**ug/L**	201.350	134	-0.000
	Zn	66	**0.009**	**ug/L**	192.533	192	0.000
	Zn	67		**ug/L**		6261	-0.003
	Zn	68		**ug/L**		684	-0.000
>	Ge	74		**ug/L**		291638	291638.350
	As	75	**-0.340**	**ug/L**	140.396	-386	-0.001
	Se	77		**ug/L**		3716	-0.002
	Se	82	**-0.094**	**ug/L**	77.285	-12	-0.000
	Kr	83		**ug/L**		87	0.000
	Sr	88	**0.002**	**ug/L**	66.506	228	0.000
	Y	89		**ug/L**		68	0.000
	Mo	98	**0.019**	**ug/L**	27.142	146	0.000
	Ag	107	**0.005**	**ug/L**	44.699	77	0.000
	Cd	111	**-0.005**	**ug/L**	66.085	18	-0.000
	Cd	114		**ug/L**		54	0.000
>	In	115		**ug/L**		201084	201084.358
	Sn	120	**0.059**	**ug/L**	28.476	538	0.001
	Sb	121	**0.278**	**ug/L**	27.016	1643	0.006
	Sb	123		**ug/L**		1322	0.005
	Ba	135		**ug/L**		48	-0.000
	Ba	137	**0.006**	**ug/L**	48.561	77	0.000
	Ho	165		**ug/L**		16	-0.000
>	Lu	175		**ug/L**		455615	455615.435
	Tl	205	**0.179**	**ug/L**	34.877	4939	0.007
	Pb	208	**0.003**	**ug/L**	36.943	803	0.000
	Bi	209		**ug/L**		134	-0.000
	Th	232	**0.049**	**ug/L**	36.689	3092	0.004
	U	238	**0.006**	**ug/L**	31.450	1084	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	0.9999
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	0.9999
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		98.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		97.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		100.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

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Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\012810S1.SIF
Batch ID:
Results Data Set: 012810S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

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Method Loaded
Method Name: SOIL **Method Last Saved: 1/4/2010 13:53:20**
Method Description: 7471A, ILM04 ANALYST JXL

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Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 1/28/2010 08:53:52**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	-0.0001	0.0002	08:54:44	Yes
2		[0.00]	0.0001	-0.0003	0.0001	08:55:13	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	29.97				

Auto-zero performed.

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Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 1/28/2010 08:55:32**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0020	0.0081	0.0022	08:56:23	Yes
2		[0.2]	0.0021	0.0093	0.0023	08:56:53	Yes
Mean:		[0.2]	0.0021				
SD:		0.0	0.0001				
%RSD:		0.0	2.74				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01038 Intercept: 0.00000

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Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 1/28/2010 08:57:12**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0054	0.0215	0.0055	08:58:03	Yes
2		[0.5]	0.0054	0.0220	0.0055	08:58:33	Yes
Mean:		[0.5]	0.0054				
SD:		0.0	0.0000				
%RSD:		0.0	0.01				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999902 Slope: 0.01072 Intercept: -0.00003

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Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 1/28/2010 08:58:52**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0219	0.0915	0.0221	08:59:44	Yes
2		[2.0]	0.0218	0.0916	0.0219	09:00:14	Yes
Mean:		[2.0]	0.0218				
SD:		0.0	0.0001				
%RSD:		0.0	0.40				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999983 Slope: 0.01095 Intercept: -0.00007

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 1/28/2010 09:00:33**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0547	0.2297	0.0548	09:01:25	Yes
2		[5.0]	0.0544	0.2281	0.0545	09:01:55	Yes
Mean:		[5.0]	0.0545				
SD:		0.0	0.0002				
%RSD:		0.0	0.43				

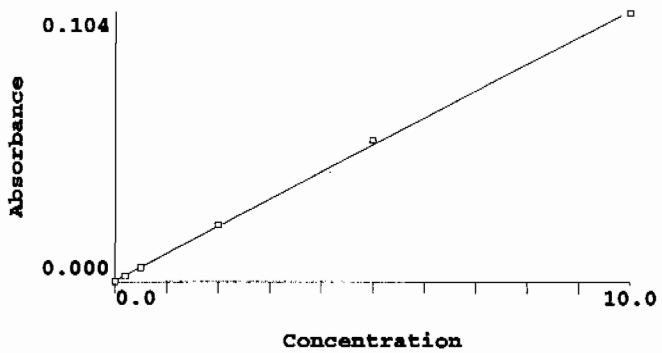
Standard number 4 applied. [5.0]
Correlation Coef.: 0.999997 Slope: 0.01092 Intercept: -0.00006

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 1/28/2010 09:02:15**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1045	0.4437	0.1046	09:03:05	Yes
2		[10.0]	0.1043	0.4410	0.1045	09:03:35	Yes
Mean:		[10.0]	0.1044				
SD:		0.0	0.0001				
%RSD:		0.0	0.12				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999747 Slope: 0.01049 Intercept: 0.00043



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.041	0.00	30.0
S0.2	0.0021	0.2	0.157	0.00	2.7
S0.5	0.0054	0.5	0.469	0.00	0.0
S2.0	0.0218	2.0	2.042	0.00	0.4

S5.0	0.0545	5.0	5.159	0.00	0.4
S10.0	0.1044	10.0	9.914	0.00	0.1

Correlation Coef.: 0.999747 Slope: 0.01049 Intercept: 0.00043

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 1/28/2010 09:03:54**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.094	5.094	0.0539	0.2278	0.0540	09:04:46	Yes
2	5.099	5.099	0.0539	0.2267	0.0540	09:05:15	Yes
Mean:	5.097	5.097	0.0539				
SD:	0.003	0.003	0.0000				
%RSD:	0.058	0.058	0.06				

QC value within limits for Hg 253.7 Recovery = 101.93%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 1/28/2010 09:05:35**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	-0.0001	-0.0016	0.0000	09:06:27	Yes
2	-0.048	-0.048	-0.0001	-0.0008	0.0001	09:06:56	Yes
Mean:	-0.050	-0.050	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.738	6.738	39.21				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 1/28/2010 09:07:16**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.164	0.164	0.0022	0.0088	0.0023	09:08:08	Yes
2	0.155	0.155	0.0021	0.0078	0.0022	09:08:38	Yes
Mean:	0.159	0.159	0.0021				
SD:	0.007	0.007	0.0001				
%RSD:	4.126	4.126	3.27				

QC value within limits for Hg 253.7 Recovery = 79.64%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 09:08:58**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.072	5.072	0.0536	0.2278	0.0538	09:09:48	Yes
2	5.052	5.052	0.0534	0.2256	0.0536	09:10:18	Yes
Mean:	5.062	5.062	0.0535				
SD:	0.014	0.014	0.0002				
%RSD:	0.286	0.286	0.28				

QC value within limits for Hg 253.7 Recovery = 101.24%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 1/28/2010 09:10:37
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	-0.0001	-0.0011	0.0001	09:11:27	Yes
2	-0.049	-0.049	-0.0001	-0.0007	0.0001	09:11:57	Yes
Mean:	-0.050	-0.050	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.809	0.809	4.85				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1202019704|943287|1
Analyst: JXL
Autosampler Location: 12
Date Collected: 1/28/2010 09:12:17
Data Type: Original

Replicate Data: 1202019704|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0001	-0.0009	0.0001	09:13:08	Yes
2	-0.051	-0.051	-0.0001	-0.0010	0.0001	09:13:38	Yes
Mean:	-0.049	-0.049	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	3.339	3.339	20.56				

Sequence No.: 13
Sample ID: 1202019705|943287|10
Analyst: JXL
Autosampler Location: 13
Date Collected: 1/28/2010 09:13:58
Data Type: Original

Replicate Data: 1202019705|943287|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.720	3.720	0.0394	0.1674	0.0396	09:14:50	Yes
2	3.699	3.699	0.0392	0.1659	0.0394	09:15:19	Yes
Mean:	3.710	3.710	0.0393				
SD:	0.015	0.015	0.0002				
%RSD:	0.410	0.410	0.41				

Sequence No.: 14
Sample ID: 244227001|943287|1
Analyst: JXL
Autosampler Location: 14
Date Collected: 1/28/2010 09:15:40
Data Type: Original

Replicate Data: 244227001|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0007	0.0017	0.0009	09:16:30	Yes
2	0.028	0.028	0.0007	0.0022	0.0009	09:17:00	Yes
Mean:	0.028	0.028	0.0007				
SD:	0.001	0.001	0.0000				
%RSD:	4.386	4.386	1.75				

Sequence No.: 15
Sample ID: 1202019706|943287|1
Analyst: JXL
Autosampler Location: 15
Date Collected: 1/28/2010 09:17:19
Data Type: Original

Replicate Data: 1202019706|943287|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.031	0.031	0.0008	0.0025	0.0009	09:18:09	Yes
2	0.028	0.028	0.0007	0.0020	0.0009	09:18:39	Yes
Mean:	0.030	0.030	0.0007				
SD:	0.003	0.003	0.0000				
%RSD:	9.377	9.377	3.90				

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Sequence No.: 16 **Autosampler Location: 16**
Sample ID: 1202019707|943287|1 **Date Collected: 1/28/2010 09:18:58**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019707|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.120	2.120	0.0227	0.0964	0.0228	09:19:48	Yes
2	2.109	2.109	0.0225	0.0950	0.0227	09:20:18	Yes
Mean:	2.114	2.114	0.0226				
SD:	0.007	0.007	0.0001				
%RSD:	0.351	0.351	0.34				

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Sequence No.: 17 **Autosampler Location: 17**
Sample ID: 1202019709|943287|1 **Date Collected: 1/28/2010 09:20:37**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019709|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.109	2.109	0.0225	0.0957	0.0227	09:21:27	Yes
2	2.101	2.101	0.0225	0.0941	0.0226	09:21:57	Yes
Mean:	2.105	2.105	0.0225				
SD:	0.005	0.005	0.0001				
%RSD:	0.253	0.253	0.25				

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Sequence No.: 18 **Autosampler Location: 18**
Sample ID: 1202019708|943287|5 **Date Collected: 1/28/2010 09:22:16**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019708|943287|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0002	0.0014	0.0004	09:23:06	Yes
2	-0.034	-0.034	0.0001	-0.0002	0.0002	09:23:36	Yes
Mean:	-0.028	-0.028	0.0001				
SD:	0.009	0.009	0.0001				
%RSD:	31.57	31.57	63.72				

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Sequence No.: 19 **Autosampler Location: 19**
Sample ID: 244227002|943287|1 **Date Collected: 1/28/2010 09:23:55**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227002|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.108	0.108	0.0016	0.0063	0.0017	09:24:46	Yes
2	0.112	0.112	0.0016	0.0074	0.0018	09:25:16	Yes
Mean:	0.110	0.110	0.0016				
SD:	0.003	0.003	0.0000				
%RSD:	2.650	2.650	1.93				

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Sequence No.: 20 **Autosampler Location: 20**
Sample ID: 244227003|943287|1 **Date Collected: 1/28/2010 09:25:35**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227003|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.137	0.137	0.0019	0.0087	0.0020	09:26:27	Yes
2	0.136	0.136	0.0019	0.0083	0.0020	09:26:57	Yes
Mean:	0.137	0.137	0.0019				
SD:	0.001	0.001	0.0000				
%RSD:	0.806	0.806	0.62				

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Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 244227004|943287|1 **Date Collected: 1/28/2010 09:27:16**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227004|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.219	0.219	0.0027	0.0119	0.0029	09:28:07	Yes
2	0.213	0.213	0.0027	0.0110	0.0028	09:28:37	Yes
Mean:	0.216	0.216	0.0027				
SD:	0.004	0.004	0.0000				
%RSD:	1.899	1.899	1.59				

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Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 09:28:56**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.005	5.005	0.0529	0.2242	0.0531	09:29:46	Yes
2	5.020	5.020	0.0531	0.2247	0.0532	09:30:16	Yes
Mean:	5.012	5.012	0.0530				
SD:	0.011	0.011	0.0001				
%RSD:	0.221	0.221	0.22				

QC value within limits for Hg 253.7 Recovery = 100.25%
All analyte(s) passed QC.

==========

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 09:30:35**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.049	-0.049	-0.0001	-0.0006	0.0001	09:31:26	Yes
2	-0.043	-0.043	-0.0000	0.0003	0.0001	09:31:56	Yes
Mean:	-0.046	-0.046	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	8.634	8.634	90.40				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 244227005|943287|1 **Date Collected: 1/28/2010 09:32:15**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227005|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.268	0.268	0.0032	0.0141	0.0034	09:33:06	Yes
2	0.265	0.265	0.0032	0.0139	0.0034	09:33:36	Yes

Mean:	0.267	0.267	0.0032
SD:	0.002	0.002	0.0000
%RSD:	0.822	0.822	0.71

==========

Sequence No.: 25 **Autosampler Location: 23**
Sample ID: 244227006|943287|1 **Date Collected: 1/28/2010 09:33:56**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227006|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.227	0.227	0.0028	0.0123	0.0030	09:34:48	Yes
2	0.231	0.231	0.0029	0.0128	0.0030	09:35:18	Yes
Mean:	0.229	0.229	0.0028				
SD:	0.003	0.003	0.0000				
%RSD:	1.284	1.284	1.09				

==========

Sequence No.: 26 **Autosampler Location: 24**
Sample ID: 244227007|943287|1 **Date Collected: 1/28/2010 09:35:38**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227007|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.036	0.036	0.0008	0.0041	0.0010	09:36:30	Yes
2	0.042	0.042	0.0009	0.0047	0.0010	09:36:59	Yes
Mean:	0.039	0.039	0.0008				
SD:	0.004	0.004	0.0000				
%RSD:	10.09	10.09	4.88				

==========

Sequence No.: 27 **Autosampler Location: 25**
Sample ID: 244227008|943287|1 **Date Collected: 1/28/2010 09:37:20**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227008|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.212	0.212	0.0027	0.0129	0.0028	09:38:12	Yes
2	0.207	0.207	0.0026	0.0127	0.0028	09:38:42	Yes
Mean:	0.210	0.210	0.0026				
SD:	0.004	0.004	0.0000				
%RSD:	1.689	1.689	1.41				

==========

Sequence No.: 28 **Autosampler Location: 26**
Sample ID: 244227009|943287|1 **Date Collected: 1/28/2010 09:39:02**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227009|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.244	0.244	0.0030	0.0140	0.0031	09:39:53	Yes
2	0.242	0.242	0.0030	0.0146	0.0031	09:40:23	Yes
Mean:	0.243	0.243	0.0030				
SD:	0.001	0.001	0.0000				
%RSD:	0.410	0.410	0.35				

==========

Sequence No.: 29 **Autosampler Location: 27**
Sample ID: 244227010|943287|1 **Date Collected: 1/28/2010 09:40:42**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227010|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.165	0.165	0.0022	0.0111	0.0023	09:41:33	Yes
2	0.166	0.166	0.0022	0.0112	0.0023	09:42:03	Yes
Mean:	0.165	0.165	0.0022				
SD:	0.000	0.000	0.0000				
%RSD:	0.181	0.181	0.14				

==========

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 244227011|943287|1 **Date Collected: 1/28/2010 09:42:22**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227011|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.011	0.011	0.0006	0.0024	0.0007	09:43:13	Yes
2	0.012	0.012	0.0006	0.0026	0.0007	09:43:43	Yes
Mean:	0.011	0.011	0.0006				
SD:	0.000	0.000	0.0000				
%RSD:	2.628	2.628	0.57				

==========

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 244227012|943287|1 **Date Collected: 1/28/2010 09:44:02**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227012|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.140	0.140	0.0019	0.0083	0.0021	09:44:53	Yes
2	0.132	0.132	0.0018	0.0079	0.0020	09:45:23	Yes
Mean:	0.136	0.136	0.0019				
SD:	0.005	0.005	0.0001				
%RSD:	3.982	3.982	3.05				

==========

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 244227013|943287|1 **Date Collected: 1/28/2010 09:45:42**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227013|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.361	0.361	0.0042	0.0181	0.0044	09:46:32	Yes
2	0.362	0.362	0.0042	0.0184	0.0044	09:47:02	Yes
Mean:	0.361	0.361	0.0042				
SD:	0.001	0.001	0.0000				
%RSD:	0.169	0.169	0.15				

==========

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 244227014|943287|1 **Date Collected: 1/28/2010 09:47:21**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227014|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.181	0.181	0.0023	0.0102	0.0025	09:48:12	Yes
2	0.180	0.180	0.0023	0.0101	0.0025	09:48:42	Yes
Mean:	0.181	0.181	0.0023				
SD:	0.001	0.001	0.0000				
%RSD:	0.497	0.497	0.40				

==========

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 09:49:01**

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.102	5.102	0.0539	0.2295	0.0541	09:49:52	Yes
2	5.115	5.115	0.0541	0.2304	0.0542	09:50:22	Yes
Mean:	5.109	5.109	0.0540				
SD:	0.009	0.009	0.0001				
%RSD:	0.184	0.184	0.18				

QC value within limits for Hg 253.7 Recovery = 102.17%
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 1/28/2010 09:50:41
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	0.0000	0.0015	0.0002	09:51:31	Yes
2	-0.030	-0.030	0.0001	0.0023	0.0003	09:52:01	Yes
Mean:	-0.034	-0.034	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	16.35	16.35	78.42				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 Autosampler Location: 32
Sample ID: 244227015|943287|1 Date Collected: 1/28/2010 09:52:21
Analyst: JXL Data Type: Original

Replicate Data: 244227015|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.096	0.096	0.0014	0.0077	0.0016	09:53:11	Yes
2	0.096	0.096	0.0014	0.0080	0.0016	09:53:41	Yes
Mean:	0.096	0.096	0.0014				
SD:	0.000	0.000	0.0000				
%RSD:	0.188	0.188	0.13				

Sequence No.: 37 Autosampler Location: 33
Sample ID: 1202019684|943278|1 Date Collected: 1/28/2010 09:54:01
Analyst: JXL Data Type: Original

Replicate Data: 1202019684|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0002	0.0033	0.0004	09:54:51	Yes
2	-0.020	-0.020	0.0002	0.0032	0.0004	09:55:21	Yes
Mean:	-0.021	-0.021	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	2.351	2.351	2.37				

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1202019685|943278|10 Date Collected: 1/28/2010 09:55:41
Analyst: JXL Data Type: Original

Replicate Data: 1202019685|943278|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.800	3.800	0.0403	0.1714	0.0404	09:56:32	Yes

Replicate Data: 244228005|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.124	0.124	0.0017	0.0081	0.0019	10:04:57	Yes
2	0.126	0.126	0.0018	0.0084	0.0019	10:05:27	Yes
Mean:	0.125	0.125	0.0017				
SD:	0.001	0.001	0.0000				
%RSD:	0.819	0.819	0.62				

==========

Sequence No.: 44 Autosampler Location: 40
Sample ID: 244228006|943278|1 Date Collected: 1/28/2010 10:05:46
Analyst: JXL Data Type: Original

Replicate Data: 244228006|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.153	0.153	0.0020	0.0094	0.0022	10:06:37	Yes
2	0.153	0.153	0.0020	0.0095	0.0022	10:07:07	Yes
Mean:	0.153	0.153	0.0020				
SD:	0.000	0.000	0.0000				
%RSD:	0.115	0.115	0.09				

==========

Sequence No.: 45 Autosampler Location: 41
Sample ID: 244888001|943278|1 Date Collected: 1/28/2010 10:07:26
Analyst: JXL Data Type: Original

Replicate Data: 244888001|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0020	0.0092	0.0022	10:08:17	Yes
2	0.156	0.156	0.0021	0.0101	0.0022	10:08:47	Yes
Mean:	0.154	0.154	0.0020				
SD:	0.003	0.003	0.0000				
%RSD:	2.238	2.238	1.76				

==========

Sequence No.: 46 Autosampler Location: 7
Sample ID: CCV Date Collected: 1/28/2010 10:09:07
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.176	5.176	0.0547	0.2332	0.0549	10:09:57	Yes
2	5.172	5.172	0.0547	0.2332	0.0548	10:10:27	Yes
Mean:	5.174	5.174	0.0547				
SD:	0.003	0.003	0.0000				
%RSD:	0.049	0.049	0.05				

QC value within limits for Hg 253.7 Recovery = 103.47%
All analyte(s) passed QC.

==========

Sequence No.: 47 Autosampler Location: 8
Sample ID: CCB Date Collected: 1/28/2010 10:10:46
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	-0.0000	0.0005	0.0001	10:11:36	Yes
2	-0.040	-0.040	0.0000	0.0012	0.0002	10:12:06	Yes
Mean:	-0.042	-0.042	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	7.815	7.815	354.02				

QC value within limits for Hg 253.7 Recovery = Not calculated

Miscellaneous

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 940131

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202011807	UI062540-MS	.51	g
MS	1202011809	UI091015-A	.5	mL
MS	1202011809	UI091015-B	.5	mL
MSD	1202011811	UI091015-A	.5	mL
MSD	1202011811	UI091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202011806		SW846 3050B	12-JAN-2010 07:30	0.527 g	50 mL	94.87666	SOIL
LCS	1202011807		SW846 3050B	12-JAN-2010 07:30	0.51 g	50 mL	98.03922	SOIL
SAMPLE	244227001		SW846 3050B	12-JAN-2010 07:30	0.506 g	50 mL	98.81423	SOIL
DUP	1202011808	244227001	SW846 3050B	12-JAN-2010 07:30	0.507 g	50 mL	98.61933	SOIL
MS	1202011809	244227001	SW846 3050B	12-JAN-2010 07:30	0.518 g	50 mL	96.5251	SOIL
MSD	1202011811	244227001	SW846 3050B	12-JAN-2010 07:30	0.518 g	50 mL	96.5251	SOIL
SDILT	1202011810	244227001	SW846 3050B	12-JAN-2010 07:30	0.506 g	50 mL	98.81423	SOIL
SAMPLE	244227002		SW846 3050B	12-JAN-2010 07:30	0.522 g	50 mL	95.78544	SOIL
SAMPLE	244227003		SW846 3050B	12-JAN-2010 07:30	0.507 g	50 mL	98.61933	SOIL
SAMPLE	244227004		SW846 3050B	12-JAN-2010 07:30	0.545 g	50 mL	91.74312	SOIL
SAMPLE	244227005		SW846 3050B	12-JAN-2010 07:30	0.514 g	50 mL	97.27626	SOIL
SAMPLE	244227006		SW846 3050B	12-JAN-2010 07:30	0.512 g	50 mL	97.65625	SOIL
SAMPLE	244227007		SW846 3050B	12-JAN-2010 07:30	0.523 g	50 mL	95.60229	SOIL
SAMPLE	244227008		SW846 3050B	12-JAN-2010 07:30	0.523 g	50 mL	95.60229	SOIL
SAMPLE	244227009		SW846 3050B	12-JAN-2010 07:30	0.509 g	50 mL	98.23183	SOIL
SAMPLE	244227010		SW846 3050B	12-JAN-2010 07:30	0.535 g	50 mL	93.45794	SOIL
SAMPLE	244227011		SW846 3050B	12-JAN-2010 07:30	0.508 g	50 mL	98.4252	SOIL
SAMPLE	244227012		SW846 3050B	12-JAN-2010 07:30	0.501 g	50 mL	99.8004	SOIL
SAMPLE	244227013		SW846 3050B	12-JAN-2010 07:30	0.507 g	50 mL	98.61933	SOIL
SAMPLE	244227014		SW846 3050B	12-JAN-2010 07:30	0.519 g	50 mL	96.33911	SOIL
SAMPLE	244227015		SW846 3050B	12-JAN-2010 07:30	0.518 g	50 mL	96.5251	SOIL

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1252836	5 mL	Nitric Acid CONC.

Comments: Sample 244227001 consist of brown, medium soil with artifacts.

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 940170

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202011894	UI062540-I	.505	g
MS	1202011896	UI091216-01	.25	mL
MS	1202011896	UI091216-06	.25	mL
MSD	1202011898	UI091216-01	.25	mL
MSD	1202011898	UI091216-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202011893		SW846 3050B	12-JAN-2010 08:00	0.55 g	50 mL	90.90909	SOIL
LCS	1202011894		SW846 3050B	12-JAN-2010 08:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	244227001		SW846 3050B	12-JAN-2010 08:00	0.521 g	50 mL	95.96929	SOIL
DUP	1202011895	244227001	SW846 3050B	12-JAN-2010 08:00	0.527 g	50 mL	94.87666	SOIL
MS	1202011896	244227001	SW846 3050B	12-JAN-2010 08:00	0.51 g	50 mL	98.03922	SOIL
MSD	1202011898	244227001	SW846 3050B	12-JAN-2010 08:00	0.521 g	50 mL	95.96929	SOIL
SDILT	1202011897	244227001	SW846 3050B	12-JAN-2010 08:00	0.521 g	50 mL	95.96929	SOIL
SAMPLE	244227002		SW846 3050B	12-JAN-2010 08:00	0.523 g	50 mL	95.60229	SOIL
SAMPLE	244227003		SW846 3050B	12-JAN-2010 08:00	0.543 g	50 mL	92.08103	SOIL
SAMPLE	244227004		SW846 3050B	12-JAN-2010 08:00	0.517 g	50 mL	96.7118	SOIL
SAMPLE	244227005		SW846 3050B	12-JAN-2010 08:00	0.523 g	50 mL	95.60229	SOIL
SAMPLE	244227006		SW846 3050B	12-JAN-2010 08:00	0.511 g	50 mL	97.84736	SOIL
SAMPLE	244227007		SW846 3050B	12-JAN-2010 08:00	0.515 g	50 mL	97.08738	SOIL
SAMPLE	244227008		SW846 3050B	12-JAN-2010 08:00	0.513 g	50 mL	97.46589	SOIL
SAMPLE	244227009		SW846 3050B	12-JAN-2010 08:00	0.506 g	50 mL	98.81423	SOIL
SAMPLE	244227010		SW846 3050B	12-JAN-2010 08:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	244227011		SW846 3050B	12-JAN-2010 08:00	0.502 g	50 mL	99.60159	SOIL
SAMPLE	244227012		SW846 3050B	12-JAN-2010 08:00	0.522 g	50 mL	95.78544	SOIL
SAMPLE	244227013		SW846 3050B	12-JAN-2010 08:00	0.524 g	50 mL	95.41985	SOIL
SAMPLE	244227014		SW846 3050B	12-JAN-2010 08:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	244227015		SW846 3050B	12-JAN-2010 08:00	0.528 g	50 mL	94.69697	SOIL

Reagent/Solvent Lot ID	Amount	Description
1252838	10 mL	HYDROCHLORIC ACID
1252836	1.25 mL	Nitric Acid CONC.

Comments: Sample 244227001 consist of brown, medium soil with artifacts.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 943286

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202019705	UI031809A	.206	g
MS	1202019707	WHG100127-14	.3	mL
MSD	1202019709	WHG100127-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202019704		SW846 7471A Prep	27-JAN-2010 12:00	0.513 g	30 mL	58.47953	SOIL
LCS	1202019705		SW846 7471A Prep	27-JAN-2010 12:00	0.206 g	30 mL	145.63107	SOIL
SAMPLE	244227001		SW846 7471A Prep	27-JAN-2010 12:00	0.506 g	30 mL	59.28854	SOIL
DUP	1202019706	244227001	SW846 7471A Prep	27-JAN-2010 12:00	0.501 g	30 mL	59.88024	SOIL
MS	1202019707	244227001	SW846 7471A Prep	27-JAN-2010 12:00	0.514 g	30 mL	58.36576	SOIL
MSD	1202019709	244227001	SW846 7471A Prep	27-JAN-2010 12:00	0.544 g	30 mL	55.14706	SOIL
SDILT	1202019708	244227001	SW846 7471A Prep	27-JAN-2010 12:00	0.506 g	30 mL	59.28854	SOIL
SAMPLE	244227002		SW846 7471A Prep	27-JAN-2010 12:00	0.515 g	30 mL	58.25243	SOIL
SAMPLE	244227003		SW846 7471A Prep	27-JAN-2010 12:00	0.567 g	30 mL	52.91005	SOIL
SAMPLE	244227004		SW846 7471A Prep	27-JAN-2010 12:00	0.528 g	30 mL	56.81818	SOIL
SAMPLE	244227005		SW846 7471A Prep	27-JAN-2010 12:00	0.574 g	30 mL	52.26481	SOIL
SAMPLE	244227006		SW846 7471A Prep	27-JAN-2010 12:00	0.506 g	30 mL	59.28854	SOIL
SAMPLE	244227007		SW846 7471A Prep	27-JAN-2010 12:00	0.565 g	30 mL	53.09735	SOIL
SAMPLE	244227008		SW846 7471A Prep	27-JAN-2010 12:00	0.526 g	30 mL	57.03422	SOIL
SAMPLE	244227009		SW846 7471A Prep	27-JAN-2010 12:00	0.543 g	30 mL	55.24862	SOIL
SAMPLE	244227010		SW846 7471A Prep	27-JAN-2010 12:00	0.55 g	30 mL	54.54545	SOIL
SAMPLE	244227011		SW846 7471A Prep	27-JAN-2010 12:00	0.589 g	30 mL	50.93379	SOIL
SAMPLE	244227012		SW846 7471A Prep	27-JAN-2010 12:00	0.527 g	30 mL	56.926	SOIL
SAMPLE	244227013		SW846 7471A Prep	27-JAN-2010 12:00	0.514 g	30 mL	58.36576	SOIL
SAMPLE	244227014		SW846 7471A Prep	27-JAN-2010 12:00	0.523 g	30 mL	57.36138	SOIL
SAMPLE	244227015		SW846 7471A Prep	27-JAN-2010 12:00	0.544 g	30 mL	55.14706	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1257474-1	.375 mL	NITRIC ACID
1255535-C	7.5 mL	5% KMnO4 solution
1255532-C	2 mL	Hg reducing agent
WHG100127-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100127-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100127-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100127-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100127-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG100127-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

Comments Sample 244227001 is a rocky brown soil.
Digestion Start Date: 27-JAN-10 12:00
Digestion End Date: 27-JAN-10 12:30

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
20-JAN-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
940132	See Below		

Potentially affected work order(s)(SDG): 244227(10-1161-1)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed RPD for MS/MSD, or PS/PSD: QC 1202011811MSD	The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for Ni due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.
2. Failed Recovery for MSD/PSD: QC 1202011811MSD	The matrix spike duplicate failed outside of the control limits for Ni due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOP's, a corrective action is not required and the data is qualified and reported.
3. Failed RPD for DUP: QC 1202011808DUP	The sample and sample duplicate % RPD failed outside the control limits for U due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Rose Jenkins 29-JAN-10

Data Validator/Group Leader:

Samantha Jacobs 01-FEB-10

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
28-JAN-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
940174	See Below		

Potentially affected work order(s)(SDG): 244227(10-1161-1)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Method Blank contamination

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed Recovery for MS/PS: QC 1202011896MS 2. Failed RPD for MS/MSD, or PS/PSD: QC 1202011898MSD 3. Failed Recovery for MSD/PSD: QC 1202011898MSD 4. Method Blank Contamination: QC 1202011893MB	1. The matrix spike recovery failed outside of the control limits for magnesium,manganese,potassium and sodium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike duplicate recovery failed outside of the control limits for magnesium,manganese and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 4. The method blank failed high for barium but all samples were 10x greater than PQL/RDL.Therefore data was not adversely affected.

Originator's Name:
Helen Camello 02-FEB-10

Data Validator/Group Leader:
Louise Smith 02-FEB-10

Standard Logbook

Serial ID:	UHG1167639-01	**Opened:**	13-AUG-09	**Amount :**	125 mL
Name:	MHGSTOCK1	**Received:**	13-AUG-09	**Catalog Number :**	PLHG4-2Y
Type:	Source Material	**Expires:**	13-AUG-10	**Lot Number :**	15-37HG
Employee:	Bryan Davis			**Solvent :**	10% HNO3
Supplier:	Spex				
Description:	Mercury Source Standard #1 1,000 mg/L				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID:	UHG1167641-02	**Opened:**	13-AUG-09	**Amount :**	100 mL
Name:	MHGSTOCK2	**Received:**	13-AUG-09	**Catalog Number :**	AHG1KN-100
Type:	Source Material	**Expires:**	13-AUG-10	**Lot Number :**	4905530
Employee:	Bryan Davis			**Solvent :**	3% HNO3
Supplier:	Ricca Chemical Company				
Description:	Mercury Source Standard #2 1,000 mg/L				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID:	UI031809A	**Opened:**	18-MAR-09	**Catalog Number :**	540
Name:	METALSOILSRM	**Received:**	18-MAR-09	**Lot Number :**	D061-540
Type:	Source Material	**Expires:**	10-OCT-10		
Employee:	Jamie Johnson				
Supplier:	ERA				
Description:	Metals LCS Soil SRM				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI062540-MS **Opened:** 12-JUN-09 **Lot Number :** D062-540
Name: ICPMS SOIL SRM **Received:** 12-JUN-09
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L

Analyte	Concentration	Analyte	Concentration
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091015-A **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091212-11 **Opened:** 12-DEC-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 12-DEC-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091212-60 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI091212-61 **Opened:** 12-DEC-09 **Amount :** .5 mL
Name: ICPMS High Range Standa **Received:** 12-DEC-09 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1018064
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI091216-01 **Opened:** 16-DEC-09 **Lot Number :** 1018095
Name: METALSPIKE-1 **Received:** 16-DEC-09
Type: Source Material **Expires:** 16-DEC-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091216-06 **Opened:** 16-DEC-09 **Lot Number :** 1018096
Name: METALSPIKE-2 **Received:** 16-DEC-09
Type: Source Material **Expires:** 16-DEC-10
Employee: Francena Armstrong
Supplier: OS2I

Standard Logbook

Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Standard Logbook

Serial ID:	UI100114-40	**Opened:**	14-JAN-10	**Amount :**	500 mL
Name:	ICP HIGH RANGE STD-A	**Received:**	14-JAN-10	**Catalog Number :**	160211-05-03
Type:	Source Material	**Expires:**	14-JAN-11	**Lot Number :**	1018160
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3
Supplier:	02SI				

Description: ICP HIGH RANGE STD SOLUTION A

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID:	UI100114-41	**Opened:**	14-JAN-10	**Amount :**	500 mL
Name:	ICP HIGH RANGE STD B	**Received:**	14-JAN-10	**Catalog Number :**	160211-05-03
Type:	Source Material	**Expires:**	14-JAN-11	**Lot Number :**	1018160
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3
Supplier:	02SI				

Description: ICP HIGH RANGE STD SOLUTION B

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID:	UI100114-48	**Opened:**	22-JAN-10	**Amount :**	1000 mL
Name:	Trace ICP ICSA	**Received:**	18-JAN-10	**Catalog Number :**	160005-02
Type:	Source Material	**Expires:**	22-JAN-11	**Lot Number :**	1018466
Employee:	Helen Camello			**Solvent :**	3% HCl + 1% HNO3
Supplier:	o2si				

Description: Trace ICP Interferent Check Standard A

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100114-49.5 **Opened:** 27-JAN-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 18-JAN-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 28-JAN-10 **Lot Number :** 1018458
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L

Analyte	Concentration	Analyte	Concentration
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG100127-01 **Opened:** 27-JAN-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 27-JAN-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 28-JAN-10 **Solvent :** 1mL HNO3 + Type1 H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: IHG100127-02 **Opened:** 27-JAN-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Intermediate **Expires:** 28-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG100127-07 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100127-08 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100127-09 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Standard Logbook

Serial ID: WHG100127-10 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100127-11 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100127-12 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100127-14 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WI100127-42 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100127-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100127-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100127-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100127-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100127-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Serial ID: WI100127-43 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI100127-44 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1259494
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI100127-45 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI100127-46 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1259494
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100127-47 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL &1%HNO3-1259494
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100114-04B **Opened:** 14-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 14-JAN-10 **Balance Id :** 40245216
Type: Working **Expires:** 15-JAN-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1238829
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100115-04 **Opened:** 15-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 15-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 16-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1253206
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100115-04A **Opened:** 15-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 15-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 16-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100114-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100114-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100114-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100114-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100114-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID:	WMS100115-05	**Opened:**	15-JAN-10	**Balance Id :**	40245216
Name:	ICPMS ICV	**Received:**	15-JAN-10	**Pipet Id :**	3541598
Type:	Working	**Expires:**	16-JAN-10	**Solvent :**	2%HNO3/1%HCl - 1253206
Employee:	Paul Boyd				
Supplier:	GEL				
Description:	ICPMS ICV				
Comments:	None				

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID:	WMS100115-06	**Opened:**	15-JAN-10	**Balance Id :**	40245216
Name:	ICPMS CRDL	**Received:**	15-JAN-10	**Pipet Id :**	3820544
Type:	Working	**Expires:**	16-JAN-10	**Solvent :**	2%HNO3/1%HCl - 1253206
Employee:	Paul Boyd				
Supplier:	GEL				
Description:	ICPMS CRDL				
Comments:	None				

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS100115-07 **Opened:** 15-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 15-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 16-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1253206
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100115-08 **Opened:** 15-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 15-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 16-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: WMS100115-70 **Opened:** 15-JAN-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 15-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 16-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1253206
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100119-04 **Opened:** 19-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 19-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 20-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1256053
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100119-04A **Opened:** 19-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 19-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100119-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100119-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100119-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100119-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100119-05 **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 19-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100119-06 **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 19-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100119-07 **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 19-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 20-JAN-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1256053
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100119-08 **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 19-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1203655-02 **Opened:** 15-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 15-OCT-09
Type: Reagent/Solvent **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Standard Logbook

Serial ID: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCl-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1244970 **Opened:** 18-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 18-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 18-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1252836 **Opened:** 08-JAN-10 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 08-JAN-10
Type: Reagent/Solvent **Expires:** 08-JAN-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1252838 **Opened:** 08-JAN-10 **Lot Number :** H41032
Name: I-HCL **Received:** 08-JAN-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 08-JAN-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1253206 **Opened:** 11-JAN-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 11-JAN-10
Type: Reagent/Solvent **Expires:** 18-JAN-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1238345	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1244970	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1255535-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Standard Logbook

Serial ID: 1256053 **Opened:** 18-JAN-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 18-JAN-10
Type: Reagent/Solvent **Expires:** 25-JAN-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1238345	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1244970	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1257474-1 **Opened:** 20-JAN-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 20-JAN-10 **Lot Number :** H20053
Type: Reagent/Solvent **Expires:** 20-JAN-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1259494 **Opened:** 25-JAN-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 28-DEC-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 31-JAN-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1161-2

Sample Analysis

Sample ID	Client ID
244228001	RE12-10-7709
244228002	RE12-10-7711
244228003	RE12-10-7712
244228004	RE12-10-7716
244228005	RE12-10-7718
244228006	RE12-10-7713
1202011874	Method Blank (MB) **ICP**
1202011875	Laboratory Control Sample (LCS)
1202011878	244242001(RE46-10-10046L) Serial Dilution (SD)
1202011876	244242001(RE46-10-10046D) Sample Duplicate (DUP)
1202011877	244242001(RE46-10-10046S) Matrix Spike (MS)
1202011879	244242001(RE46-10-10046SD) Matrix Spike Duplicate (MSD)
1202011785	Method Blank (MB) **ICP-MS**
1202011786	Laboratory Control Sample (LCS)
1202011789	244242001(RE46-10-10046L) Serial Dilution (SD)
1202011787	244242001(RE46-10-10046D) Sample Duplicate (DUP)
1202011788	244242001(RE46-10-10046S) Matrix Spike (MS)
1202011790	244242001(RE46-10-10046SD) Matrix Spike Duplicate (MSD)
1202019684	Method Blank (MB) **CVAA**
1202019685	Laboratory Control Sample (LCS)

1202019688	244920001(RE16-10-941L) Serial Dilution (SD)
1202019686	244920001(RE16-10-941D) Sample Duplicate (DUP)
1202019687	244920001(RE16-10-941S) Matrix Spike (MS)
1202019689	244920001(RE16-10-941SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	940165, 940123 and 943278
Prep Batch :	940157, 940113 and 943275
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of

scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits with the exception of iron and potassium, which recovered outside of the advisory limits of 70-130%.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 244242001 and 244920001.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of calcium, magnesium and potassium, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD did not meet the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of magnesium and potassium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of lead and manganese, as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DER was generated for this SDG: 785647. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristin Parson **Date:** 2/3/10

Sample Data Summary

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228001 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7709 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 84

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5440000	ug/Kg		7730	22700	22700	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-36-0	Antimony	724	ug/Kg	J	375	1140	1140	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-38-2	Arsenic	1.75	mg/kg		0.236	1.18	1.18	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-39-3	Barium	72500	ug/Kg		114	568	568	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-41-7	Beryllium	0.780	mg/kg		0.0236	0.118	0.118	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-43-9	Cadmium	204	ug/Kg	J	114	568	568	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-70-2	Calcium	1670000	ug/Kg		9100	28400	28400	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-47-3	Chromium	14500	ug/Kg		171	568	568	1	P	HSC	01/29/10 19:31	012910-3	940165
7440-48-4	Cobalt	2180	ug/Kg		171	568	568	1	P	HSC	01/29/10 19:31	012910-3	940165
7440-50-8	Copper	5300	ug/Kg		341	1140	1140	1	P	HSC	01/29/10 19:31	012910-3	940165
7439-89-6	Iron	11700000	ug/Kg		9100	28400	28400	1	P	HSC	01/27/10 09:55	012710-1	940165
7439-92-1	Lead	11000	ug/Kg		284	1140	1140	1	P	HSC	01/27/10 09:55	012710-1	940165
7439-95-4	Magnesium	1190000	ug/Kg		9660	34100	34100	1	P	HSC	01/27/10 09:55	012710-1	940165
7439-96-5	Manganese	330000	ug/Kg		227	1140	1140	1	P	HSC	01/27/10 09:55	012710-1	940165
7439-97-6	Mercury	9.69	ug/kg	J	4.74	13.9	13.9	1	AV	JXL1	01/28/10 09:58	012810S1-5	943278
7440-02-0	Nickel	5.89	mg/kg		0.118	0.472	0.472	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-09-7	Potassium	958000	ug/Kg		7280	28400	28400	1	P	HSC	01/27/10 09:55	012710-1	940165
7782-49-2	Selenium	1.18	mg/kg	U	0.59	1.18	1.18	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-22-4	Silver	568	ug/Kg	U	114	568	568	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-23-5	Sodium	72400	ug/Kg		7960	28400	28400	1	P	HSC	01/27/10 09:55	012710-1	940165
7440-28-0	Thallium	0.124	mg/kg	J	0.0708	0.236	0.236	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-61-1	Uranium	19.1	mg/kg		0.0156	0.0472	0.0472	2	MS	RMJ	01/20/10 01:11	100119-4	940123
7440-62-2	Vanadium	11000	ug/Kg		114	568	568	1	P	HSC	01/29/10 19:31	012910-3	940165
7440-66-6	Zinc	47000	ug/Kg		375	1140	1140	1	P	HSC	01/27/10 09:55	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.503	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.522	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.511	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228002 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7711 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4640000	ug/Kg		8190	24100	24100	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-36-0	Antimony	1200	ug/Kg	U	398	1200	1200	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-38-2	Arsenic	1.91	mg/kg		0.241	1.2	1.2	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-39-3	Barium	56300	ug/Kg		120	602	602	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-41-7	Beryllium	0.668	mg/kg		0.0241	0.12	0.12	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-43-9	Cadmium	194	ug/Kg	J	120	602	602	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-70-2	Calcium	1360000	ug/Kg		9640	30100	30100	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-47-3	Chromium	11300	ug/Kg		181	602	602	1	P	HSC	01/29/10 19:38	012910-3	940165
7440-48-4	Cobalt	1800	ug/Kg		181	602	602	1	P	HSC	01/29/10 19:38	012910-3	940165
7440-50-8	Copper	5360	ug/Kg		361	1200	1200	1	P	HSC	01/29/10 19:38	012910-3	940165
7439-89-6	Iron	10500000	ug/Kg		9640	30100	30100	1	P	HSC	01/27/10 09:59	012710-1	940165
7439-92-1	Lead	9350	ug/Kg		301	1200	1200	1	P	HSC	01/27/10 09:59	012710-1	940165
7439-95-4	Magnesium	984000	ug/Kg		10200	36100	36100	1	P	HSC	01/27/10 09:59	012710-1	940165
7439-96-5	Manganese	318000	ug/Kg		241	1200	1200	1	P	HSC	01/27/10 09:59	012710-1	940165
7439-97-6	Mercury	8.65	ug/kg	J	4.14	12.2	12.2	1	AV	JXL1	01/28/10 10:00	012810S1-5	943278
7440-02-0	Nickel	5.14	mg/kg		0.12	0.482	0.482	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-09-7	Potassium	802000	ug/Kg		7710	30100	30100	1	P	HSC	01/27/10 09:59	012710-1	940165
7782-49-2	Selenium	1.2	mg/kg	U	0.602	1.2	1.2	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-22-4	Silver	602	ug/Kg	U	120	602	602	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-23-5	Sodium	79200	ug/Kg		8430	30100	30100	1	P	HSC	01/27/10 09:59	012710-1	940165
7440-28-0	Thallium	0.106	mg/kg	J	0.0723	0.241	0.241	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-61-1	Uranium	5.41	mg/kg		0.0159	0.0482	0.0482	2	MS	RMJ	01/20/10 01:17	100119-4	940123
7440-62-2	Vanadium	9150	ug/Kg		120	602	602	1	P	HSC	01/29/10 19:38	012910-3	940165
7440-66-6	Zinc	42200	ug/Kg		398	1200	1200	1	P	HSC	01/27/10 09:59	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.599	g	30	mL	01/27/10	TXB3

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228003 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7712 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 90

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3820000	ug/Kg		7290	21400	21400	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-36-0	Antimony	372	ug/Kg	J	354	1070	1070	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-38-2	Arsenic	0.997	mg/kg	J	0.221	1.11	1.11	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-39-3	Barium	28700	ug/Kg		107	536	536	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-41-7	Beryllium	0.877	mg/kg		0.0221	0.111	0.111	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-43-9	Cadmium	188	ug/Kg	J	107	536	536	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-70-2	Calcium	772000	ug/Kg		8580	26800	26800	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-47-3	Chromium	11100	ug/Kg		161	536	536	1	P	HSC	01/29/10 19:45	012910-3	940165
7440-48-4	Cobalt	801	ug/Kg		161	536	536	1	P	HSC	01/29/10 19:45	012910-3	940165
7440-50-8	Copper	3630	ug/Kg		322	1070	1070	1	P	HSC	01/29/10 19:45	012910-3	940165
7439-89-6	Iron	10600000	ug/Kg		8580	26800	26800	1	P	HSC	01/27/10 10:10	012710-1	940165
7439-92-1	Lead	3450	ug/Kg		268	1070	1070	1	P	HSC	01/27/10 10:10	012710-1	940165
7439-95-4	Magnesium	627000	ug/Kg		9110	32200	32200	1	P	HSC	01/27/10 10:10	012710-1	940165
7439-96-5	Manganese	280000	ug/Kg		214	1070	1070	1	P	HSC	01/27/10 10:10	012710-1	940165
7439-97-6	Mercury	12.9	ug/kg		4.26	12.5	12.5	1	AV	JXL1	01/28/10 10:02	012810S1-5	943278
7440-02-0	Nickel	4.21	mg/kg		0.111	0.442	0.442	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-09-7	Potassium	473000	ug/Kg		6860	26800	26800	1	P	HSC	01/27/10 10:10	012710-1	940165
7782-49-2	Selenium	1.11	mg/kg	U	0.553	1.11	1.11	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-22-4	Silver	536	ug/Kg	U	107	536	536	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-23-5	Sodium	128000	ug/Kg		7510	26800	26800	1	P	HSC	01/27/10 10:10	012710-1	940165
7440-28-0	Thallium	0.221	mg/kg	U	0.0664	0.221	0.221	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-61-1	Uranium	0.728	mg/kg		0.0146	0.0442	0.0442	2	MS	RMJ	01/20/10 01:23	100119-4	940123
7440-62-2	Vanadium	5890	ug/Kg		107	536	536	1	P	HSC	01/29/10 19:45	012910-3	940165
7440-66-6	Zinc	44300	ug/Kg		354	1070	1070	1	P	HSC	01/27/10 10:10	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.521	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.535	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228004 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7716 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 95.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4040000	ug/Kg		6790	20000	20000	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-36-0	Antimony	999	ug/Kg	U	330	999	999	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-38-2	Arsenic	1.64	mg/kg		0.205	1.02	1.02	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-39-3	Barium	44800	ug/Kg		99.9	500	500	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-41-7	Beryllium	0.490	mg/kg		0.0205	0.102	0.102	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-43-9	Cadmium	275	ug/Kg	J	99.9	500	500	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-70-2	Calcium	1280000	ug/Kg		7990	25000	25000	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-47-3	Chromium	9150	ug/Kg		150	500	500	1	P	HSC	01/29/10 19:52	012910-3	940165
7440-48-4	Cobalt	3370	ug/Kg		749	2500	2500	5	P	HSC	01/29/10 19:59	012910-3	940165
7440-50-8	Copper	3640	ug/Kg		300	999	999	1	P	HSC	01/29/10 19:52	012910-3	940165
7439-89-6	Iron	22100000	ug/Kg		7990	25000	25000	1	P	HSC	01/27/10 10:13	012710-1	940165
7439-92-1	Lead	8300	ug/Kg		250	999	999	1	P	HSC	01/27/10 10:13	012710-1	940165
7439-95-4	Magnesium	956000	ug/Kg		8490	30000	30000	1	P	HSC	01/27/10 10:13	012710-1	940165
7439-96-5	Manganese	417000	ug/Kg		200	999	999	1	P	HSC	01/27/10 10:13	012710-1	940165
7439-97-6	Mercury	6.53	ug/kg	J	3.83	11.3	11.3	1	AV	JXL1	01/28/10 10:03	012810S1-5	943278
7440-02-0	Nickel	3.45	mg/kg		0.102	0.41	0.41	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-09-7	Potassium	776000	ug/Kg		6390	25000	25000	1	P	HSC	01/27/10 10:13	012710-1	940165
7782-49-2	Selenium	1.02	mg/kg	U	0.512	1.02	1.02	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-22-4	Silver	500	ug/Kg	U	99.9	500	500	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-23-5	Sodium	81900	ug/Kg		6990	25000	25000	1	P	HSC	01/27/10 10:13	012710-1	940165
7440-28-0	Thallium	0.0816	mg/kg	J	0.0615	0.205	0.205	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-61-1	Uranium	0.551	mg/kg		0.0135	0.041	0.041	2	MS	RMJ	01/20/10 01:29	100119-4	940123
7440-62-2	Vanadium	23200	ug/Kg		99.9	500	500	1	P	HSC	01/29/10 19:52	012910-3	940165
7440-66-6	Zinc	85600	ug/Kg		330	999	999	1	P	HSC	01/27/10 10:13	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.512	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.525	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.559	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228005 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7718 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2950000	ug/Kg		7590	22300	22300	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-36-0	Antimony	1120	ug/Kg	U	368	1120	1120	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-38-2	Arsenic	2.19	mg/kg		0.223	1.11	1.11	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-39-3	Barium	26000	ug/Kg		112	558	558	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-41-7	Beryllium	0.477	mg/kg		0.0223	0.111	0.111	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-43-9	Cadmium	558	ug/Kg	U	112	558	558	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-70-2	Calcium	637000	ug/Kg		8930	27900	27900	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-47-3	Chromium	32100	ug/Kg		167	558	558	1	P	HSC	01/29/10 20:06	012910-3	940165
7440-48-4	Cobalt	915	ug/Kg		167	558	558	1	P	HSC	01/29/10 20:06	012910-3	940165
7440-50-8	Copper	3110	ug/Kg		335	1120	1120	1	P	HSC	01/29/10 20:06	012910-3	940165
7439-89-6	Iron	8440000	ug/Kg		8930	27900	27900	1	P	HSC	01/27/10 10:17	012710-1	940165
7439-92-1	Lead	4480	ug/Kg		279	1120	1120	1	P	HSC	01/27/10 10:17	012710-1	940165
7439-95-4	Magnesium	442000	ug/Kg		9490	33500	33500	1	P	HSC	01/27/10 10:17	012710-1	940165
7439-96-5	Manganese	179000	ug/Kg		223	1120	1120	1	P	HSC	01/27/10 10:17	012710-1	940165
7439-97-6	Mercury	8.29	ug/kg	J	4.51	13.3	13.3	1	AV	JXL1	01/28/10 10:05	012810S1-5	943278
7440-02-0	Nickel	5.14	mg/kg		0.111	0.446	0.446	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-09-7	Potassium	434000	ug/Kg		7140	27900	27900	1	P	HSC	01/27/10 10:17	012710-1	940165
7782-49-2	Selenium	1.11	mg/kg	U	0.557	1.11	1.11	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-22-4	Silver	558	ug/Kg	U	112	558	558	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-23-5	Sodium	136000	ug/Kg		7810	27900	27900	1	P	HSC	01/27/10 10:17	012710-1	940165
7440-28-0	Thallium	0.223	mg/kg	U	0.0668	0.223	0.223	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-61-1	Uranium	1.37	mg/kg		0.0147	0.0446	0.0446	2	MS	RMJ	01/20/10 01:35	100119-4	940123
7440-62-2	Vanadium	5290	ug/Kg		112	558	558	1	P	HSC	01/29/10 20:06	012910-3	940165
7440-66-6	Zinc	34100	ug/Kg		368	1120	1120	1	P	HSC	01/27/10 10:17	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.516	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.515	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.52	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1161-2 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 244228006 **BASIS:** Dry Weight **DATE COLLECTED** 06-JAN-10

CLIENT ID: RE12-10-7713 **LEVEL:** Low **DATE RECEIVED** 09-JAN-10

MATRIX: SOIL **%SOLIDS:** 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4600000	ug/Kg		9050	26600	26600	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-36-0	Antimony	547	ug/Kg	J	439	1330	1330	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-38-2	Arsenic	1.94	mg/kg		0.268	1.34	1.34	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-39-3	Barium	61500	ug/Kg		133	666	666	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-41-7	Beryllium	0.609	mg/kg		0.0268	0.134	0.134	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-43-9	Cadmium	184	ug/Kg	J	133	666	666	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-70-2	Calcium	1390000	ug/Kg		10700	33300	33300	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-47-3	Chromium	18800	ug/Kg		200	666	666	1	P	HSC	01/29/10 20:14	012910-3	940165
7440-48-4	Cobalt	1940	ug/Kg		200	666	666	1	P	HSC	01/29/10 20:14	012910-3	940165
7440-50-8	Copper	6940	ug/Kg		399	1330	1330	1	P	HSC	01/29/10 20:14	012910-3	940165
7439-89-6	Iron	10300000	ug/Kg		10700	33300	33300	1	P	HSC	01/27/10 10:21	012710-1	940165
7439-92-1	Lead	11700	ug/Kg		333	1330	1330	1	P	HSC	01/27/10 10:21	012710-1	940165
7439-95-4	Magnesium	966000	ug/Kg		11300	39900	39900	1	P	HSC	01/27/10 10:21	012710-1	940165
7439-96-5	Manganese	273000	ug/Kg		266	1330	1330	1	P	HSC	01/27/10 10:21	012710-1	940165
7439-97-6	Mercury	12.2	ug/kg	J	5.43	16	16	1	AV	JXL1	01/28/10 10:07	012810S1-5	943278
7440-02-0	Nickel	5.01	mg/kg		0.134	0.536	0.536	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-09-7	Potassium	808000	ug/Kg		8520	33300	33300	1	P	HSC	01/27/10 10:21	012710-1	940165
7782-49-2	Selenium	1.34	mg/kg	U	0.67	1.34	1.34	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-22-4	Silver	666	ug/Kg	U	133	666	666	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-23-5	Sodium	65700	ug/Kg		9320	33300	33300	1	P	HSC	01/27/10 10:21	012710-1	940165
7440-28-0	Thallium	0.106	mg/kg	J	0.0804	0.268	0.268	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-61-1	Uranium	6.78	mg/kg		0.0177	0.0536	0.0536	2	MS	RMJ	01/20/10 01:41	100119-4	940123
7440-62-2	Vanadium	9980	ug/Kg		133	666	666	1	P	HSC	01/29/10 20:14	012910-3	940165
7440-66-6	Zinc	41000	ug/Kg		439	1330	1330	1	P	HSC	01/27/10 10:21	012710-1	940165

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
940123	940113	SW846 3050B	0.505	g	50	mL	01/12/10	AXG2
940165	940157	SW846 3050B	0.508	g	50	mL	01/12/10	AXG2
943278	943275	SW846 7471A Prep	0.508	g	30	mL	01/27/10	TXB3

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Arsenic	46.1	ug/L	50	ug/L	92.3	90.0 – 110.0	MS	20–JAN–10 00:06	100119–4
	Beryllium	51.2	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	20–JAN–10 00:06	100119–4
	Nickel	50.8	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	20–JAN–10 00:06	100119–4
	Selenium	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	20–JAN–10 00:06	100119–4
	Thallium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	20–JAN–10 00:06	100119–4
	Uranium	54.2	ug/L	50	ug/L	108.5	90.0 – 110.0	MS	20–JAN–10 00:06	100119–4
	Aluminum	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Antimony	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Barium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Cadmium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Calcium	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Iron	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Lead	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Magnesium	5170	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Manganese	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Potassium	2390	ug/L	2500	ug/L	95.4	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Silver	264	ug/L	250	ug/L	105.6	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Sodium	2420	ug/L	2500	ug/L	96.9	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Zinc	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	27–JAN–10 08:41	012710–1
	Mercury	5.1	ug/L	5	ug/L	101.9	90.0 – 110.0	AV	28–JAN–10 09:05	012810S1–5
	Chromium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	29–JAN–10 10:49	012910–2
	Cobalt	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	29–JAN–10 10:49	012910–2
	Copper	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	29–JAN–10 10:49	012910–2
	Vanadium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	29–JAN–10 10:49	012910–2
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	29–JAN–10 18:02	012910–3
	Cobalt	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	29–JAN–10 18:02	012910–3
	Copper	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	29–JAN–10 18:02	012910–3
	Vanadium	515	ug/L	500	ug/L	103	90.0 – 110.0	P	29–JAN–10 18:02	012910–3
CCV01										
	Arsenic	46.4	ug/L	50	ug/L	92.8	90.0 – 110.0	MS	20–JAN–10 00:36	100119–4

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Beryllium	52.6	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	20–JAN–10 00:36	100119–4
	Nickel	49.4	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	20–JAN–10 00:36	100119–4
	Selenium	50.5	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	20–JAN–10 00:36	100119–4
	Thallium	48.2	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	20–JAN–10 00:36	100119–4
	Uranium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	20–JAN–10 00:36	100119–4
	Aluminum	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Antimony	534	ug/L	500	ug/L	106.9	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Barium	527	ug/L	500	ug/L	105.4	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Cadmium	528	ug/L	500	ug/L	105.7	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Calcium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Iron	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Lead	529	ug/L	500	ug/L	105.9	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Magnesium	5320	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Manganese	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Potassium	5240	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Silver	528	ug/L	500	ug/L	105.5	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Sodium	10400	ug/L	10000	ug/L	103.8	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Zinc	525	ug/L	500	ug/L	105.1	90.0 – 110.0	P	27–JAN–10 09:04	012710–1
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	28–JAN–10 09:10	012810S1–5
	Chromium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	29–JAN–10 11:35	012910–2
	Cobalt	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	29–JAN–10 11:35	012910–2
	Copper	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	29–JAN–10 11:35	012910–2
	Vanadium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	29–JAN–10 11:35	012910–2
	Chromium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	29–JAN–10 18:48	012910–3
	Cobalt	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	29–JAN–10 18:48	012910–3
	Copper	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	29–JAN–10 18:48	012910–3
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	29–JAN–10 18:48	012910–3
CCV02										
	Arsenic	47.6	ug/L	50	ug/L	95.3	90.0 – 110.0	MS	20–JAN–10 00:59	100119–4
	Beryllium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	20–JAN–10 00:59	100119–4

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1161-2

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Nickel	49.8	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	20-JAN-10 00:59	100119-4
	Selenium	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	20-JAN-10 00:59	100119-4
	Thallium	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	20-JAN-10 00:59	100119-4
	Uranium	53.1	ug/L	50	ug/L	106.2	90.0 – 110.0	MS	20-JAN-10 00:59	100119-4
	Aluminum	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Antimony	541	ug/L	500	ug/L	108.2	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Barium	528	ug/L	500	ug/L	105.5	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Cadmium	528	ug/L	500	ug/L	105.5	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Calcium	5310	ug/L	5000	ug/L	106.2	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Iron	5290	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Lead	535	ug/L	500	ug/L	106.9	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Magnesium	5340	ug/L	5000	ug/L	106.8	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Manganese	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Potassium	5210	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Silver	530	ug/L	500	ug/L	106	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Sodium	10400	ug/L	10000	ug/L	104.3	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Zinc	525	ug/L	500	ug/L	105	90.0 – 110.0	P	27-JAN-10 09:20	012710-1
	Mercury	5.01	ug/L	5	ug/L	100.2	80.0 – 120.0	AV	28-JAN-10 09:30	012810S1-5
	Chromium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	29-JAN-10 11:49	012910-2
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	29-JAN-10 11:49	012910-2
	Copper	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	29-JAN-10 11:49	012910-2
	Vanadium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	29-JAN-10 11:49	012910-2
	Chromium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	29-JAN-10 19:09	012910-3
	Cobalt	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	29-JAN-10 19:09	012910-3
	Copper	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	29-JAN-10 19:09	012910-3
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	29-JAN-10 19:09	012910-3
CCV03										
	Arsenic	46.6	ug/L	50	ug/L	93.2	90.0 – 110.0	MS	20-JAN-10 01:47	100119-4
	Beryllium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	20-JAN-10 01:47	100119-4
	Nickel	51.2	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	20-JAN-10 01:47	100119-4

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Selenium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	20–JAN–10 01:47	100119–4
	Thallium	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	20–JAN–10 01:47	100119–4
	Uranium	53.6	ug/L	50	ug/L	107.2	90.0 – 110.0	MS	20–JAN–10 01:47	100119–4
	Aluminum	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Antimony	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Barium	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Cadmium	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Iron	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Lead	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Manganese	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Potassium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Silver	515	ug/L	500	ug/L	103	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Sodium	10100	ug/L	10000	ug/L	101.3	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Zinc	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	27–JAN–10 10:02	012710–1
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 – 120.0	AV	28–JAN–10 09:50	012810S1–5
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	29–JAN–10 12:10	012910–2
	Cobalt	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	29–JAN–10 12:10	012910–2
	Copper	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	29–JAN–10 12:10	012910–2
	Vanadium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	29–JAN–10 12:10	012910–2
	Chromium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	29–JAN–10 20:21	012910–3
	Cobalt	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	29–JAN–10 20:21	012910–3
	Copper	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	29–JAN–10 20:21	012910–3
	Vanadium	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	29–JAN–10 20:21	012910–3
CCV04										
	Arsenic	46.9	ug/L	50	ug/L	93.8	90.0 – 110.0	MS	20–JAN–10 02:46	100119–4
	Beryllium	49.5	ug/L	50	ug/L	99.1	90.0 – 110.0	MS	20–JAN–10 02:46	100119–4
	Nickel	50.1	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	20–JAN–10 02:46	100119–4
	Selenium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	20–JAN–10 02:46	100119–4

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Thallium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	20–JAN–10 02:46	100119–4
	Uranium	52.9	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	20–JAN–10 02:46	100119–4
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Antimony	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Barium	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Cadmium	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Iron	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Lead	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Magnesium	5250	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Manganese	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Silver	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Sodium	10100	ug/L	10000	ug/L	101.1	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Zinc	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	27–JAN–10 10:43	012710–1
	Mercury	5.17	ug/L	5	ug/L	103.5	80.0 – 120.0	AV	28–JAN–10 10:10	012810S1–5
	Chromium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	29–JAN–10 13:38	012910–2
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	29–JAN–10 13:38	012910–2
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	29–JAN–10 13:38	012910–2
	Vanadium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	29–JAN–10 13:38	012910–2
	Chromium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	29–JAN–10 21:39	012910–3
	Cobalt	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	29–JAN–10 21:39	012910–3
	Copper	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	29–JAN–10 21:39	012910–3
	Vanadium	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	29–JAN–10 21:39	012910–3
CCV05										
	Mercury	5.17	ug/L	5	ug/L	103.5	80.0 – 120.0	AV	28–JAN–10 10:30	012810S1–5
	Chromium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	29–JAN–10 14:05	012910–2
	Cobalt	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	29–JAN–10 14:05	012910–2
	Copper	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	29–JAN–10 14:05	012910–2
	Vanadium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	29–JAN–10 14:05	012910–2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1161-2

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,JCPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV06										
	Mercury	5.08	ug/L	5	ug/L	101.6	80.0 – 120.0	AV	28-JAN-10 10:50	012810S1-5
	Chromium	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	29-JAN-10 14:31	012910-2
	Cobalt	500	ug/L	500	ug/L	100	90.0 – 110.0	P	29-JAN-10 14:31	012910-2
	Copper	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	29-JAN-10 14:31	012910-2
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	29-JAN-10 14:31	012910-2
CCV07										
	Mercury	5.05	ug/L	5	ug/L	100.9	80.0 – 120.0	AV	28-JAN-10 11:10	012810S1-5
CCV08										
	Mercury	4.99	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	28-JAN-10 11:30	012810S1-5
CCV09										
	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 – 120.0	AV	28-JAN-10 11:51	012810S1-5
CCV10										
	Mercury	5	ug/L	5	ug/L	100	80.0 – 120.0	AV	28-JAN-10 12:11	012810S1-5
CCV11										
	Mercury	4.99	ug/L	5	ug/L	99.8	80.0 – 120.0	AV	28-JAN-10 12:31	012810S1-5
CCV12										
	Mercury	5	ug/L	5	ug/L	100	80.0 – 120.0	AV	28-JAN-10 12:52	012810S1-5
CCV13										
	Mercury	5.09	ug/L	5	ug/L	101.9	80.0 – 120.0	AV	28-JAN-10 13:12	012810S1-5
CCV14										
	Mercury	5.18	ug/L	5	ug/L	103.6	80.0 – 120.0	AV	28-JAN-10 13:33	012810S1-5
CCV15										
	Mercury	5.18	ug/L	5	ug/L	103.6	80.0 – 120.0	AV	28-JAN-10 13:40	012810S1-5
CCV16										
	Mercury	5.22	ug/L	5	ug/L	104.3	80.0 – 120.0	AV	28-JAN-10 14:15	012810S1-5

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1161-2

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS6,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Nickel	2.13	ug/L	2	ug/L	106.5	70.0 – 130.0	MS	20-JAN-10 00:18	100119-4
	Thallium	1.1	ug/L	1	ug/L	109.7	70.0 – 130.0	MS	20-JAN-10 00:18	100119-4
	Arsenic	5.84	ug/L	5	ug/L	116.8	70.0 – 130.0	MS	20-JAN-10 00:18	100119-4
	Beryllium	.555	ug/L	.5	ug/L	111	70.0 – 130.0	MS	20-JAN-10 00:18	100119-4
	Uranium	.247	ug/L	.2	ug/L	123.5	70.0 – 130.0	MS	20-JAN-10 00:18	100119-4
	Selenium	5.32	ug/L	5	ug/L	106.4	70.0 – 130.0	MS	20-JAN-10 00:18	100119-4
	Mercury	.159	ug/L	.2	ug/L	79.5	70.0 – 130.0	AV	28-JAN-10 09:08	012810S1-5
PQL01										
	Silver	5.26	ug/L	5	ug/L	105.3	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Iron	132	ug/L	100	ug/L	132.2	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Potassium	197	ug/L	150	ug/L	131.1	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Manganese	10.5	ug/L	10	ug/L	105.4	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Magnesium	361	ug/L	300	ug/L	120.2	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Lead	9.4	ug/L	10	ug/L	94	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Aluminum	212	ug/L	200	ug/L	106.1	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Sodium	293	ug/L	300	ug/L	97.6	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Antimony	10.3	ug/L	10	ug/L	102.5	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Barium	4.97	ug/L	5	ug/L	99.4	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Cadmium	5.1	ug/L	5	ug/L	101.9	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Zinc	9.93	ug/L	10	ug/L	99.3	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Calcium	205	ug/L	200	ug/L	102.7	70.0 – 130.0	P	27-JAN-10 08:48	012710-1
	Chromium	4.87	ug/L	5	ug/L	97.4	70.0 – 130.0	P	29-JAN-10 11:03	012910-2
	Cobalt	5.42	ug/L	5	ug/L	108.5	70.0 – 130.0	P	29-JAN-10 11:03	012910-2
	Copper	10.3	ug/L	10	ug/L	102.5	70.0 – 130.0	P	29-JAN-10 11:03	012910-2
	Vanadium	4.79	ug/L	5	ug/L	95.8	70.0 – 130.0	P	29-JAN-10 11:03	012910-2
	Chromium	4.96	ug/L	5	ug/L	99.2	70.0 – 130.0	P	29-JAN-10 18:16	012910-3
	Cobalt	5.16	ug/L	5	ug/L	103.2	70.0 – 130.0	P	29-JAN-10 18:16	012910-3
	Copper	10.6	ug/L	10	ug/L	105.9	70.0 – 130.0	P	29-JAN-10 18:16	012910-3
	Vanadium	5.25	ug/L	5	ug/L	104.9	70.0 – 130.0	P	29-JAN-10 18:16	012910-3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161–2

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	20–JAN–10 00:12	100119–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	20–JAN–10 00:12	100119–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	20–JAN–10 00:12	100119–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	20–JAN–10 00:12	100119–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	20–JAN–10 00:12	100119–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	20–JAN–10 00:12	100119–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 08:44	012710–1
	Antimony	5.66	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 08:44	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 08:44	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 08:44	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 08:44	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 08:44	012710–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	27–JAN–10 08:44	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 08:44	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 08:44	012710–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	27–JAN–10 08:44	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 08:44	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 08:44	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 08:44	012710–1
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 09:06	012810S1–5
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 10:56	012910–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 10:56	012910–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 10:56	012910–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 10:56	012910–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 18:09	012910–3
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 18:09	012910–3
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 18:09	012910–3
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 18:09	012910–3
CCB01										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	20–JAN–10 00:42	100119–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	20–JAN–10 00:42	100119–4

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161–2

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	20–JAN–10 00:42	100119–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	20–JAN–10 00:42	100119–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	20–JAN–10 00:42	100119–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	20–JAN–10 00:42	100119–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 09:08	012710–1
	Antimony	5.24	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 09:08	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:08	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:08	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 09:08	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 09:08	012710–1
	Lead	2.62	+/–10	J	2.5	10.0	SOL	P	27–JAN–10 09:08	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 09:08	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 09:08	012710–1
	Potassium	82.92	+/–250	J	64.0	250	SOL	P	27–JAN–10 09:08	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:08	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 09:08	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 09:08	012710–1
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 09:11	012810S1–5
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 11:42	012910–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 11:42	012910–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 11:42	012910–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 11:42	012910–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 18:55	012910–3
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 18:55	012910–3
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 18:55	012910–3
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 18:55	012910–3
CCB02										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	20–JAN–10 01:05	100119–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	20–JAN–10 01:05	100119–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	20–JAN–10 01:05	100119–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	20–JAN–10 01:05	100119–4

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161–2

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	20–JAN–10 01:05	100119–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	20–JAN–10 01:05	100119–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 09:24	012710–1
	Antimony	4.76	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 09:24	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:24	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:24	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 09:24	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 09:24	012710–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	27–JAN–10 09:24	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 09:24	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 09:24	012710–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	27–JAN–10 09:24	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 09:24	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 09:24	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 09:24	012710–1
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 09:31	012810S1–5
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 11:56	012910–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 11:56	012910–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 11:56	012910–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 11:56	012910–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 19:16	012910–3
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 19:16	012910–3
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 19:16	012910–3
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 19:16	012910–3
CCB03										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	20–JAN–10 01:53	100119–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	20–JAN–10 01:53	100119–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	20–JAN–10 01:53	100119–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	20–JAN–10 01:53	100119–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	20–JAN–10 01:53	100119–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	20–JAN–10 01:53	100119–4

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161–2

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 10:06	012710–1
	Antimony	5.31	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 10:06	012710–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 10:06	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 10:06	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 10:06	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 10:06	012710–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	27–JAN–10 10:06	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 10:06	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 10:06	012710–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	27–JAN–10 10:06	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 10:06	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 10:06	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 10:06	012710–1
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 09:52	012810S1–5
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 12:17	012910–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 12:17	012910–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 12:17	012910–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 12:17	012910–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 20:28	012910–3
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 20:28	012910–3
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 20:28	012910–3
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 20:28	012910–3
CCB04										
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	20–JAN–10 02:52	100119–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	20–JAN–10 02:52	100119–4
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	20–JAN–10 02:52	100119–4
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	20–JAN–10 02:52	100119–4
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	20–JAN–10 02:52	100119–4
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	20–JAN–10 02:52	100119–4
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	27–JAN–10 10:47	012710–1
	Antimony	4.25	+/–10	J	3.3	10.0	SOL	P	27–JAN–10 10:47	012710–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161–2

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 10:47	012710–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 10:47	012710–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 10:47	012710–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	27–JAN–10 10:47	012710–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	27–JAN–10 10:47	012710–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	27–JAN–10 10:47	012710–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	27–JAN–10 10:47	012710–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	27–JAN–10 10:47	012710–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	27–JAN–10 10:47	012710–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	27–JAN–10 10:47	012710–1
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	27–JAN–10 10:47	012710–1
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 10:12	012810S1–5
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 13:45	012910–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 13:45	012910–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 13:45	012910–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 13:45	012910–2
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 21:46	012910–3
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 21:46	012910–3
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 21:46	012910–3
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 21:46	012910–3
CCB05										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 10:32	012810S1–5
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 14:12	012910–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 14:12	012910–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 14:12	012910–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 14:12	012910–2
CCB06										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 10:52	012810S1–5
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 14:38	012910–2
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	29–JAN–10 14:38	012910–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	29–JAN–10 14:38	012910–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1161–2

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	29–JAN–10 14:38	012910–2
CCB07	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 11:12	012810S1–5
CCB08	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 11:32	012810S1–5
CCB09	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 11:52	012810S1–5
CCB10	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 12:13	012810S1–5
CCB11	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 12:33	012810S1–5
CCB12	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 12:53	012810S1–5
CCB13	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 13:14	012810S1–5
CCB14	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 13:34	012810S1–5
CCB15	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 13:41	012810S1–5
CCB16	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	28–JAN–10 14:16	012810S1–5

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 10–1161–2

Contract: LANL01004

Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202011785								
	Arsenic	0.191	mg/kg	+/–0.956	U	MS	0.191	0.956
	Beryllium	0.0191	mg/kg	+/–0.0956	U	MS	0.0191	0.0956
	Nickel	0.0956	mg/kg	+/–0.382	U	MS	0.0956	0.382
	Selenium	0.478	mg/kg	+/–0.956	U	MS	0.478	0.956
	Thallium	0.0574	mg/kg	+/–0.191	U	MS	0.0574	0.191
	Uranium	0.0126	mg/kg	+/–0.0382	U	MS	0.0126	0.0382
1202011874								
	Aluminum	6630	ug/Kg	+/–19500	U	P	6630	19500
	Antimony	322	ug/Kg	+/–975	U	P	322	975
	Barium	97.5	ug/Kg	+/–487	U	P	97.5	487
	Cadmium	97.5	ug/Kg	+/–487	U	P	97.5	487
	Calcium	7800	ug/Kg	+/–24400	U	P	7800	24400
	Chromium	146	ug/Kg	+/–487	U	P	146	487
	Cobalt	146	ug/Kg	+/–487	U	P	146	487
	Copper	292	ug/Kg	+/–975	U	P	292	975
	Iron	10900	ug/Kg	+/–24400	J	P	7800	24400
	Lead	244	ug/Kg	+/–975	U	P	244	975
	Magnesium	8280	ug/Kg	+/–29200	U	P	8280	29200
	Manganese	195	ug/Kg	+/–975	U	P	195	975
	Potassium	6240	ug/Kg	+/–24400	U	P	6240	24400
	Silver	97.5	ug/Kg	+/–487	U	P	97.5	487
	Sodium	6820	ug/Kg	+/–24400	U	P	6820	24400
	Vanadium	97.5	ug/Kg	+/–487	U	P	97.5	487
	Zinc	322	ug/Kg	+/–975	U	P	322	975
1202019684								
	Mercury	3.7	ug/kg	+/–10.9	U	AV	3.7	10.9

METALS
–4–
Interference Check Sample

SDG No: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	525000	ug/L	500000	ug/L	105	80.0 – 120.0	27–JAN–10 08:52	012710–1
	Antimony	13.8	ug/L					27–JAN–10 08:52	012710–1
	Barium	6.9	ug/L					27–JAN–10 08:52	012710–1
	Cadmium	2.2	ug/L					27–JAN–10 08:52	012710–1
	Calcium	502000	ug/L	500000	ug/L	100	80.0 – 120.0	27–JAN–10 08:52	012710–1
	Iron	194000	ug/L	200000	ug/L	97.2	80.0 – 120.0	27–JAN–10 08:52	012710–1
	Lead	–9.52	ug/L					27–JAN–10 08:52	012710–1
	Magnesium	504000	ug/L	500000	ug/L	101	80.0 – 120.0	27–JAN–10 08:52	012710–1
	Manganese	–3.01	ug/L					27–JAN–10 08:52	012710–1
	Potassium	–62.8	ug/L					27–JAN–10 08:52	012710–1
	Silver	–6.45	ug/L					27–JAN–10 08:52	012710–1
	Sodium	2.65	ug/L					27–JAN–10 08:52	012710–1
	Zinc	–0.849	ug/L					27–JAN–10 08:52	012710–1
ICSAB01									
	Aluminum	534000	ug/L	500000	ug/L	107	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Antimony	546	ug/L	500	ug/L	109	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Barium	526	ug/L	500	ug/L	105	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Cadmium	487	ug/L	500	ug/L	97.4	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Calcium	511000	ug/L	500000	ug/L	102	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Iron	199000	ug/L	200000	ug/L	99.3	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Lead	501	ug/L	500	ug/L	100	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Magnesium	515000	ug/L	500000	ug/L	103	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Manganese	494	ug/L	500	ug/L	98.8	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Potassium	5310	ug/L	5000	ug/L	106	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Silver	265	ug/L	250	ug/L	106	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Sodium	5280	ug/L	5000	ug/L	106	80.0 – 120.0	27–JAN–10 08:54	012710–1
	Zinc	491	ug/L	500	ug/L	98.3	80.0 – 120.0	27–JAN–10 08:54	012710–1

METALS
-4-
Interference Check Sample

SDG No: 10-1161-2

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Chromium	1.61	ug/L					29-JAN-10 11:10	012910-2
	Cobalt	-1.48	ug/L					29-JAN-10 11:10	012910-2
	Copper	5.05	ug/L					29-JAN-10 11:10	012910-2
	Vanadium	-0.57	ug/L					29-JAN-10 11:10	012910-2
ICSAB01									
	Chromium	477	ug/L	500	ug/L	95.4	80.0 - 120.0	29-JAN-10 11:16	012910-2
	Cobalt	446	ug/L	500	ug/L	89.2	80.0 - 120.0	29-JAN-10 11:16	012910-2
	Copper	570	ug/L	500	ug/L	114	80.0 - 120.0	29-JAN-10 11:16	012910-2
	Vanadium	499	ug/L	500	ug/L	99.8	80.0 - 120.0	29-JAN-10 11:16	012910-2

METALS
–4–
Interference Check Sample

SDG No: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Chromium	0.462	ug/L					29–JAN–10 18:23	012910–3
	Cobalt	–1.5	ug/L					29–JAN–10 18:23	012910–3
	Copper	5.35	ug/L					29–JAN–10 18:23	012910–3
	Vanadium	–0.091	ug/L					29–JAN–10 18:23	012910–3
ICSAB01									
	Chromium	481	ug/L	500	ug/L	96.3	80.0 – 120.0	29–JAN–10 18:29	012910–3
	Cobalt	452	ug/L	500	ug/L	90.4	80.0 – 120.0	29–JAN–10 18:29	012910–3
	Copper	577	ug/L	500	ug/L	115	80.0 – 120.0	29–JAN–10 18:29	012910–3
	Vanadium	506	ug/L	500	ug/L	101	80.0 – 120.0	29–JAN–10 18:29	012910–3

METALS
–4–
Interference Check Sample

SDG No: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS6

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.03	ug/L					20–JAN–10 00:24	100119–4
	Beryllium	0.054	ug/L					20–JAN–10 00:24	100119–4
	Nickel	3.08	ug/L					20–JAN–10 00:24	100119–4
	Selenium	–1.41	ug/L					20–JAN–10 00:24	100119–4
	Thallium	0.039	ug/L					20–JAN–10 00:24	100119–4
	Uranium	0.005	ug/L					20–JAN–10 00:24	100119–4
ICSAB01									
	Arsenic	20.4	ug/L	20	ug/L	102	80.0 – 120.0	20–JAN–10 00:30	100119–4
	Beryllium	20.5	ug/L	20	ug/L	103	80.0 – 120.0	20–JAN–10 00:30	100119–4
	Nickel	21.4	ug/L	22.7	ug/L	94.1	80.0 – 120.0	20–JAN–10 00:30	100119–4
	Selenium	20.0	ug/L	20	ug/L	100	80.0 – 120.0	20–JAN–10 00:30	100119–4
	Thallium	18.8	ug/L	20	ug/L	94.1	80.0 – 120.0	20–JAN–10 00:30	100119–4
	Uranium	21.8	ug/L	20	ug/L	109	80.0 – 120.0	20–JAN–10 00:30	100119–4

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-1161-2 **Client ID** RE46-10-10046S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 88

Sample ID: 244242001 **Spike ID:** 1202011788

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	10		1.34		8.8	98.6		MS
Beryllium	mg/kg	75-125	6.11		0.446		5.5	103		MS
Nickel	mg/kg	75-125	8.72		4.14		5.5	83.1		MS
Selenium	mg/kg	75-125	2.25		0.562	U	2.2	93.7		MS
Thallium	mg/kg	75-125	10.5		0.0958	J	11	94.6		MS
Uranium	mg/kg	75-125	6.41		0.684		5.5	104		MS

METALS
-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1161-2 **Client ID** RE46-10-10046SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 88

Sample ID: 244242001 **Spike ID:** 1202011790

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	10.5		1.34		9.12	100		MS
Beryllium	mg/kg	75-125	5.9		0.446		5.7	95.7		MS
Nickel	mg/kg	75-125	9.38		4.14		5.7	91.8		MS
Selenium	mg/kg	75-125	2.22		0.562	U	2.28	89.4		MS
Thallium	mg/kg	75-125	10.6		0.0958	J	11.4	92		MS
Uranium	mg/kg	75-125	6.49		0.684		5.7	102		MS

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–1161–2 **Client ID** RE46–10–10046S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 88

Sample ID: 244242001 **Spike ID:** 1202011877

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		6490000		3130000		552000	608	N/A	P
Antimony	ug/Kg	75–125	51800		630	J	55200	92.7		P
Barium	ug/Kg	75–125	111000		42000		55200	124		P
Cadmium	ug/Kg	75–125	57400		119	J	55200	104		P
Calcium	ug/Kg	75–125	1600000		857000		552000	134	N	P
Chromium	ug/Kg	75–125	59200		3810		55200	100		P
Cobalt	ug/Kg	75–125	55400		1870		55200	96.9		P
Copper	ug/Kg	75–125	64000		4180		55200	108		P
Iron	ug/Kg		10200000		10000000		552000	27.2	N/A	P
Lead	ug/Kg	75–125	68700		15000		55200	97.3		P
Magnesium	ug/Kg	75–125	1550000		622000		552000	168	N	P
Manganese	ug/Kg		346000		326000		55200	35.7	N/A	P
Potassium	ug/Kg	75–125	1300000		522000		552000	140	N	P
Silver	ug/Kg	75–125	57600		109	U	55200	104		P
Sodium	ug/Kg	75–125	669000		96500		552000	104		P
Vanadium	ug/Kg	75–125	65700		11000		55200	99.1		P
Zinc	ug/Kg	75–125	102000		44200		55200	104		P

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–1161–2 **Client ID** RE46–10–10046SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 88

Sample ID: 244242001 **Spike ID:** 1202011879

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		6140000		3130000		557000	540	N/A	P
Antimony	ug/Kg	75–125	53200		630	J	55700	94.5		P
Barium	ug/Kg	75–125	98100		42000		55700	101		P
Cadmium	ug/Kg	75–125	57800		119	J	55700	104		P
Calcium	ug/Kg	75–125	1510000		857000		557000	118		P
Chromium	ug/Kg	75–125	59800		3810		55700	101		P
Cobalt	ug/Kg	75–125	55200		1870		55700	95.9		P
Copper	ug/Kg	75–125	66600		4180		55700	112		P
Iron	ug/Kg		10200000		10000000		557000	26.6	N/A	P
Lead	ug/Kg	75–125	68000		15000		55700	95.3		P
Magnesium	ug/Kg	75–125	1420000		622000		557000	144	N	P
Manganese	ug/Kg		312000		326000		55700	–26.1	N/A	P
Potassium	ug/Kg	75–125	1260000		522000		557000	132	N	P
Silver	ug/Kg	75–125	58200		109	U	55700	105		P
Sodium	ug/Kg	75–125	669000		96500		557000	103		P
Vanadium	ug/Kg	75–125	65400		11000		55700	97.8		P
Zinc	ug/Kg	75–125	100000		44200		55700	100		P

METALS
–5a–
Matrix Spike Summary

SDG NO. 10–1161–2 **Client ID** RE16–10–941S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 244920001 **Spike ID:** 1202019687

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg		861		690		128	134	N/A	AV

METALS
–5a–
Matrix Spike Duplicate Summary

SDG NO. 10–1161–2 **Client ID** RE16–10–941SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 90

Sample ID: 244920001 **Spike ID:** 1202019689

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg		874		690		122	150	N/A	AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE46–10–10046D

Sample ID: 244242001 **Duplicate ID:** 1202011787 **Percent Solids for Dup:** 88

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.13	1.34		1.6		17.6		MS
Beryllium	mg/kg	+/–.113	0.446		0.533		17.7		MS
Nickel	mg/kg	+/–20%	4.14		4.39		5.78		MS
Selenium	mg/kg		0.562	U	0.564	U			MS
Thallium	mg/kg	+/–.226	0.0958	J	0.107	J	11.5		MS
Uranium	mg/kg	+/–20%	0.684		0.79		14.3		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE46–10–10046SD

Sample ID: 1202011788 **Duplicate ID:** 1202011790 **Percent Solids for Dup:** 88

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	10		10.5		4.32		MS
Beryllium	mg/kg	+/–20	6.11		5.9		3.5		MS
Nickel	mg/kg	+/–20	8.72		9.38		7.32		MS
Selenium	mg/kg	+/–20	2.25		2.22		1.05		MS
Thallium	mg/kg	+/–20	10.5		10.6		.757		MS
Uranium	mg/kg	+/–20	6.41		6.49		1.24		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE46–10–10046D

Sample ID: 244242001 **Duplicate ID:** 1202011876 **Percent Solids for Dup:** 88

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	3130000		3130000		.18		P
Antimony	ug/Kg		630	J	372	U	200		P
Barium	ug/Kg	+/–20%	42000		42300		.866		P
Cadmium	ug/Kg	+/–563	119	J	183	J	42.6		P
Calcium	ug/Kg	+/–20%	857000		926000		7.66		P
Chromium	ug/Kg	+/–20%	3810		3560		6.72		P
Cobalt	ug/Kg	+/–563	1870		1760		6.02		P
Copper	ug/Kg	+/–1130	4180		4360		4.37		P
Iron	ug/Kg	+/–20%	10000000		9580000		4.71		P
Lead	ug/Kg	+/–20%	15000		10400		36.3	*	P
Magnesium	ug/Kg	+/–20%	622000		646000		3.85		P
Manganese	ug/Kg	+/–20%	326000		265000		20.7	*	P
Potassium	ug/Kg	+/–20%	522000		509000		2.69		P
Silver	ug/Kg		109	U	113	U			P
Sodium	ug/Kg	+/–28200	96500		83500		14.5		P
Vanadium	ug/Kg	+/–20%	11000		11000		.138		P
Zinc	ug/Kg	+/–20%	44200		43400		1.74		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE46–10–10046SD

Sample ID: 1202011877 **Duplicate ID:** 1202011879 **Percent Solids for Dup:** 88

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	6490000		6140000		5.57		P
Antimony	ug/Kg	+/–20	51800		53200		2.72		P
Barium	ug/Kg	+/–20	111000		98100		12.1		P
Cadmium	ug/Kg	+/–20	57400		57800		.772		P
Calcium	ug/Kg	+/–20	1600000		1510000		5.17		P
Chromium	ug/Kg	+/–20	59200		59800		1.04		P
Cobalt	ug/Kg	+/–20	55400		55200		.28		P
Copper	ug/Kg	+/–20	64000		66600		4.05		P
Iron	ug/Kg	+/–20	10200000		10200000		.0212		P
Lead	ug/Kg	+/–20	68700		68000		1.02		P
Magnesium	ug/Kg	+/–20	1550000		1420000		8.47		P
Manganese	ug/Kg	+/–20	346000		312000		10.4		P
Potassium	ug/Kg	+/–20	1300000		1260000		2.81		P
Silver	ug/Kg	+/–20	57600		58200		.937		P
Sodium	ug/Kg	+/–20	669000		669000		.0721		P
Vanadium	ug/Kg	+/–20	65700		65400		.466		P
Zinc	ug/Kg	+/–20	102000		100000		1.55		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE16–10–941D

Sample ID: 244920001 **Duplicate ID:** 1202019686 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20%	690		744		7.54		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1161–2

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE16–10–941SD

Sample ID: 1202019687 **Duplicate ID:** 1202019689 **Percent Solids for Dup:** 90

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/–20	861		874		1.51		AV

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–1161–2

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202011786								
	Arsenic	mg/kg	104	114		109	83–120	MS
	Beryllium	mg/kg	77.6	81.2		105	81.2–126.8	MS
	Nickel	mg/kg	134	145		109	83.3–121.4	MS
	Selenium	mg/kg	286	309		108	80.2–125.9	MS
	Thallium	mg/kg	121	124		102	78–123.2	MS
	Uranium	mg/kg	2.13	2.16		101	61.9–130.7	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–1161–2

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202011875								
	Aluminum	ug/Kg	10500000	9750000		92.8	56–144	P
	Antimony	ug/Kg	173000	145000		84	71–130	P
	Barium	ug/Kg	198000	215000		109	80–120	P
	Cadmium	ug/Kg	60700	71800		118	81–120	P
	Calcium	ug/Kg	9870000	11500000		116	83–117	P
	Chromium	ug/Kg	236000	251000		106	80–120	P
	Cobalt	ug/Kg	91200	96100		105	81–120	P
	Copper	ug/Kg	174000	196000		113	81–118	P
	Iron	ug/Kg	18000000	19800000		110	51–149	P
	Lead	ug/Kg	86000	97700		114	79–121	P
	Magnesium	ug/Kg	4000000	4220000		105	79–122	P
	Manganese	ug/Kg	558000	611000		110	81–119	P
	Potassium	ug/Kg	4300000	4460000		104	74–127	P
	Silver	ug/Kg	30100	34200		114	66–134	P
	Sodium	ug/Kg	1020000	1160000		113	74–127	P
	Vanadium	ug/Kg	115000	120000		105	79–121	P
	Zinc	ug/Kg	594000	672000		113	80–121	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–1161–2

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202019685								
	Mercury	ug/kg	5150	5430		105	71.6–128.3	AV

METALS
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Serial Dilution Sample Summary

SDG NO. 10-1161-2 **Client ID** RE46-10-10046L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 244242001 **Serial Dilution ID:** 1202011789

Analyte	Initial Value µg/L	C	Serial Value µg/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	5.95		6.15	J	3.36			MS
Beryllium	1.99		1.75	J	12.1			MS
Nickel	18.4		15.2		17.4			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.426	J	1.5	U	100			MS
Uranium	3.04		2.82		7.24			MS

METALS
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Serial Dilution Sample Summary

SDG NO. 10–1161–2 **Client ID:** RE46–10–10046L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 244242001 **Serial Dilution ID:** 1202011878

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	28700		28500		.697		10	P
Antimony	5.77	J	16.5	U	100			P
Barium	384		373		2.86		10	P
Cadmium	1.09	J	5	U	100			P
Calcium	7850		7700		1.91		10	P
Chromium	34.9		35.1		.573			P
Cobalt	17.2		16.9	J	1.74			P
Copper	38.3		37.5	J	2.09			P
Iron	92000		91500		.543		10	P
Lead	137		137		.365		10	P
Magnesium	5690		5850		2.81		10	P
Manganese	2990		2940		1.67		10	P
Potassium	4780		4780		.105		10	P
Silver	1	U	5	U				P
Sodium	884		615	J	30.4			P
Vanadium	101		103		1.98		10	P
Zinc	405		389		4.07		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1161-2 **Client ID** RE16-10-941L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 244920001 **Serial Dilution ID:** 1202019688

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	5.62		5.85		4.09		10	AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–1161–2 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	940157						
1202011874	MB for batch 940157	MB	S	12–JAN–10	.513g	50mL	
1202011875	LCS for batch 940157	LCS	S	12–JAN–10	.506g	50mL	
1202011877	RE46–10–10046S	MS	S	12–JAN–10	.516g	50mL	
1202011879	RE46–10–10046SD	MSD	S	12–JAN–10	.512g	50mL	
1202011876	RE46–10–10046D	DUP	S	12–JAN–10	.506g	50mL	
244228001	RE12–10–7709	SAMPLE	S	12–JAN–10	.522g	50mL	
244228002	RE12–10–7711	SAMPLE	S	12–JAN–10	.505g	50mL	
244228003	RE12–10–7712	SAMPLE	S	12–JAN–10	.521g	50mL	
244228004	RE12–10–7716	SAMPLE	S	12–JAN–10	.525g	50mL	
244228005	RE12–10–7718	SAMPLE	S	12–JAN–10	.515g	50mL	
244228006	RE12–10–7713	SAMPLE	S	12–JAN–10	.508g	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10–1161–2 **Method Type:** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	940113						
1202011785	MB for batch 940113	MB	S	12–JAN–10	.523g	50mL	
1202011786	LCS for batch 940113	LCS	S	12–JAN–10	.523g	50mL	
1202011788	RE46–10–10046S	MS	S	12–JAN–10	.518g	50mL	
1202011790	RE46–10–10046SD	MSD	S	12–JAN–10	.5g	50mL	
1202011787	RE46–10–10046D	DUP	S	12–JAN–10	.505g	50mL	
244228001	RE12–10–7709	SAMPLE	S	12–JAN–10	.503g	50mL	
244228002	RE12–10–7711	SAMPLE	S	12–JAN–10	.505g	50mL	
244228003	RE12–10–7712	SAMPLE	S	12–JAN–10	.505g	50mL	
244228004	RE12–10–7716	SAMPLE	S	12–JAN–10	.512g	50mL	
244228005	RE12–10–7718	SAMPLE	S	12–JAN–10	.516g	50mL	
244228006	RE12–10–7713	SAMPLE	S	12–JAN–10	.505g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1161-2 **Method Type**: AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 943275							
1202019684	MB for batch 943275	MB	S	27-JAN-10	.552g	30mL	
1202019685	LCS for batch 943275	LCS	S	27-JAN-10	.209g	30mL	
1202019687	RE16-10-941S	MS	S	27-JAN-10	.524g	30mL	
1202019689	RE16-10-941SD	MSD	S	27-JAN-10	.547g	30mL	
1202019686	RE16-10-941D	DUP	S	27-JAN-10	.55g	30mL	
244228001	RE12-10-7709	SAMPLE	S	27-JAN-10	.511g	30mL	
244228002	RE12-10-7711	SAMPLE	S	27-JAN-10	.599g	30mL	
244228003	RE12-10-7712	SAMPLE	S	27-JAN-10	.535g	30mL	
244228004	RE12-10-7716	SAMPLE	S	27-JAN-10	.559g	30mL	
244228005	RE12-10-7718	SAMPLE	S	27-JAN-10	.52g	30mL	
244228006	RE12-10-7713	SAMPLE	S	27-JAN-10	.508g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS6
Start Date: 19–JAN–10 **End Date:** 20–JAN–10

Client Sdg: 10–1161–2
Method MS
Data File: 100119–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	23:48			X		X											X		X			X	X		
S10	1	23:54			X		X											X		X			X	X		
S100	1	00:00			X		X											X		X			X	X		
ICV01	1	00:06			X		X											X		X			X	X		
ICB01	1	00:12			X		X											X		X			X	X		
CRDL01	1	00:18			X		X											X		X			X	X		
ICSA01	1	00:24			X		X											X		X			X	X		
ICSAB01	1	00:30			X		X											X		X			X	X		
CCV01	1	00:36			X		X											X		X			X	X		
CCB01	1	00:42			X		X											X		X			X	X		
1202011785	2	00:47			X		X											X		X			X	X		
1202011786	40	00:53			X		X											X		X			X	X		
CCV02	1	00:59			X		X											X		X			X	X		
CCB02	1	01:05			X		X											X		X			X	X		
244228001	2	01:11			X		X											X		X			X	X		
244228002	2	01:17			X		X											X		X			X	X		
244228003	2	01:23			X		X											X		X			X	X		
244228004	2	01:29			X		X											X		X			X	X		
244228005	2	01:35			X		X											X		X			X	X		
244228006	2	01:41			X		X											X		X			X	X		
CCV03	1	01:47			X		X											X		X			X	X		
CCB03	1	01:53			X		X											X		X			X	X		
ZZZZZZ	2	01:58																								
1202011787	2	02:04			X		X											X		X			X	X		
1202011788	2	02:10			X		X											X		X			X	X		
1202011790	2	02:16			X		X											X		X			X	X		
1202011789	10	02:22			X		X											X		X			X	X		
ZZZZZZ	2	02:28																								
ZZZZZZ	2	02:34																								
ZZZZZZ	2	02:40																								
CCV04	1	02:46			X		X											X		X			X	X		
CCB04	1	02:52			X		X											X		X			X	X		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 29-JAN-10 **End Date:** 29-JAN-10

Client Sdg: 10-1161-2
Method P
Data File: 012910-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	10:15								X	X	X													X	
S0.1	1	10:23								X	X	X													X	
S0.5	1	10:29								X	X	X													X	
SCAL	1	10:36								X	X	X													X	
S10	1	10:44																								
ICV01	1	10:49								X	X	X													X	
ICB01	1	10:56								X	X	X													X	
PQL01	1	11:03								X	X	X													X	
ICSA01	1	11:10								X	X	X													X	
ICSAB01	1	11:16								X	X	X													X	
LR01	1	11:22								X	X	X													X	
LR02	1	11:28								X	X	X													X	
CCV01	1	11:35								X	X	X													X	
CCB01	1	11:42								X	X	X													X	
CCV02	1	11:49								X	X	X													X	
CCB02	1	11:56								X	X	X													X	
LR03	1	12:03								X	X	X													X	
CCV03	1	12:10								X	X	X													X	
CCB03	1	12:17								X	X	X													X	
ZZZZZZ	1	12:32																								
ZZZZZZ	1	12:40																								
ZZZZZZ	1	12:47																								
ZZZZZZ	1	12:54																								
ZZZZZZ	1	13:01																								
ZZZZZZ	1	13:08																								
ZZZZZZ	1	13:16																								
ZZZZZZ	1	13:23																								
ZZZZZZ	5	13:30																								
CCV04	1	13:38								X	X	X													X	
CCB04	1	13:45								X	X	X													X	
ZZZZZZ	1	13:53																								
ZZZZZZ	1	13:59																								
CCV05	1	14:05								X	X	X													X	
CCB05	1	14:12								X	X	X													X	
1202011875	1	14:19								X	X	X													X	
ZZZZZZ	1	14:25																								
CCV06	1	14:31								X	X	X													X	
CCB06	1	14:38								X	X	X													X	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 29-JAN-10 **End Date:** 29-JAN-10

Client Sdg: 10-1161-2
Method P
Data File: 012910-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	17:29								X	X	X													X	
S0.1	1	17:36								X	X	X													X	
S0.5	1	17:42								X	X	X													X	
SCAL	1	17:49								X	X	X													X	
S10	1	17:57																								
ICV01	1	18:02								X	X	X													X	
ICB01	1	18:09								X	X	X													X	
PQL01	1	18:16								X	X	X													X	
ICSA01	1	18:23								X	X	X													X	
ICSAB01	1	18:29								X	X	X													X	
LR01	1	18:35								X	X	X													X	
LR02	1	18:41								X	X	X													X	
CCV01	1	18:48								X	X	X													X	
CCB01	1	18:55								X	X	X													X	
LR03	1	19:02								X	X	X													X	
CCV02	1	19:09								X	X	X													X	
CCB02	1	19:16								X	X	X													X	
1202011874	1	19:24								X	X	X													X	
244228001	1	19:31								X	X	X													X	
244228002	1	19:38								X	X	X													X	
244228003	1	19:45								X	X	X													X	
244228004	1	19:52								X		X													X	
244228004	5	19:59									X															
244228005	1	20:06								X	X	X													X	
244228006	1	20:14								X	X	X													X	
CCV03	1	20:21								X	X	X													X	
CCB03	1	20:28								X	X	X													X	
ZZZZZZ	1	20:35																								
1202011876	1	20:43								X	X	X													X	
1202011877	1	20:50								X	X	X													X	
1202011879	1	20:57								X	X	X													X	
1202011878	5	21:04								X	X	X													X	
ZZZZZZ	1	21:11																								
ZZZZZZ	1	21:18																								
ZZZZZZ	1	21:25																								
ZZZZZZ	1	21:32																								
CCV04	1	21:39								X	X	X													X	
CCB04	1	21:46								X	X	X													X	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: HG3
Start Date: 28–JAN–10 **End Date:** 28–JAN–10

Client Sdg: 10–1161–2
Method AV
Data File: 012810S1–5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	08:55															X									
S0.2	1	08:56															X									
S0.5	1	08:58															X									
S2.0	1	09:00															X									
S5.0	1	09:01															X									
S10.0	1	09:03															X									
ICV01	1	09:05															X									
ICB01	1	09:06															X									
CRDL01	1	09:08															X									
CCV01	1	09:10															X									
CCB01	1	09:11															X									
ZZZZZZ	1	09:13																								
ZZZZZZ	10	09:15																								
ZZZZZZ	1	09:17																								
ZZZZZZ	1	09:18																								
ZZZZZZ	1	09:20																								
ZZZZZZ	1	09:21																								
ZZZZZZ	5	09:23																								
ZZZZZZ	1	09:25																								
ZZZZZZ	1	09:26																								
ZZZZZZ	1	09:28																								
CCV02	1	09:30															X									
CCB02	1	09:31															X									
ZZZZZZ	1	09:33																								
ZZZZZZ	1	09:35																								
ZZZZZZ	1	09:36																								
ZZZZZZ	1	09:38																								
ZZZZZZ	1	09:40																								
ZZZZZZ	1	09:42																								
ZZZZZZ	1	09:43																								
ZZZZZZ	1	09:45																								
ZZZZZZ	1	09:47																								
ZZZZZZ	1	09:48																								
CCV03	1	09:50															X									
CCB03	1	09:52															X									
ZZZZZZ	1	09:53																								
1202019684	1	09:55															X									
1202019685	10	09:57															X									
244228001	1	09:58															X									
244228002	1	10:00															X									

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																								
244228003	1	10:02														X										
244228004	1	10:03														X										
244228005	1	10:05														X										
244228006	1	10:07														X										
ZZZZZZ	1	10:08																								
CCV04	1	10:10														X										
CCB04	1	10:12														X										
ZZZZZZ	1	10:13																								
ZZZZZZ	1	10:15																								
ZZZZZZ	1	10:17																								
ZZZZZZ	1	10:18																								
ZZZZZZ	1	10:20																								
ZZZZZZ	1	10:22																								
ZZZZZZ	1	10:23																								
ZZZZZZ	1	10:25																								
ZZZZZZ	1	10:27																								
ZZZZZZ	1	10:28																								
CCV05	1	10:30														X										
CCB05	1	10:32														X										
ZZZZZZ	1	10:33																								
ZZZZZZ	1	10:35																								
ZZZZZZ	1	10:37																								
ZZZZZZ	5	10:38																								
ZZZZZZ	1	10:40																								
ZZZZZZ	1	10:42																								
ZZZZZZ	1	10:43																								
ZZZZZZ	10	10:45																								
ZZZZZZ	1	10:47																								
ZZZZZZ	1	10:48																								
CCV06	1	10:50														X										
CCB06	1	10:52														X										
ZZZZZZ	1	10:54																								
ZZZZZZ	1	10:55																								
ZZZZZZ	5	10:57																								
ZZZZZZ	1	10:59																								
ZZZZZZ	1	11:00																								
ZZZZZZ	1	11:02																								
ZZZZZZ	1	11:04																								
ZZZZZZ	1	11:05																								
ZZZZZZ	1	11:07																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	11:09																								
CCV07	1	11:10															X									
CCB07	1	11:12															X									
ZZZZZZ	1	11:14																								
ZZZZZZ	1	11:15																								
ZZZZZZ	1	11:17																								
ZZZZZZ	1	11:19																								
ZZZZZZ	1	11:20																								
ZZZZZZ	1	11:22																								
ZZZZZZ	1	11:24																								
ZZZZZZ	10	11:25																								
ZZZZZZ	1	11:27																								
ZZZZZZ	1	11:29																								
CCV08	1	11:30															X									
CCB08	1	11:32															X									
ZZZZZZ	1	11:34																								
ZZZZZZ	1	11:36																								
ZZZZZZ	1	11:37																								
ZZZZZZ	1	11:39																								
ZZZZZZ	1	11:41																								
ZZZZZZ	1	11:42																								
ZZZZZZ	1	11:44																								
ZZZZZZ	1	11:46																								
ZZZZZZ	1	11:47																								
ZZZZZZ	1	11:49																								
CCV09	1	11:51															X									
CCB09	1	11:52															X									
ZZZZZZ	1	11:54																								
ZZZZZZ	1	11:56																								
ZZZZZZ	1	11:57																								
ZZZZZZ	5	11:59																								
ZZZZZZ	1	12:01																								
ZZZZZZ	1	12:03																								
ZZZZZZ	1	12:04																								
ZZZZZZ	1	12:06																								
ZZZZZZ	1	12:08																								
ZZZZZZ	1	12:09																								
CCV10	1	12:11															X									
CCB10	1	12:13															X									
ZZZZZZ	1	12:14																								

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	12:16																								
ZZZZZZ	10	12:18																								
ZZZZZZ	1	12:19																								
ZZZZZZ	1	12:21																								
ZZZZZZ	1	12:23																								
ZZZZZZ	1	12:25																								
ZZZZZZ	5	12:26																								
ZZZZZZ	1	12:28																								
ZZZZZZ	1	12:30																								
CCV11	1	12:31														X										
CCB11	1	12:33														X										
ZZZZZZ	1	12:35																								
ZZZZZZ	1	12:36																								
ZZZZZZ	1	12:38																								
ZZZZZZ	1	12:40																								
ZZZZZZ	1	12:42																								
ZZZZZZ	1	12:43																								
ZZZZZZ	1	12:45																								
ZZZZZZ	1	12:47																								
ZZZZZZ	1	12:48																								
ZZZZZZ	1	12:50																								
CCV12	1	12:52														X										
CCB12	1	12:53														X										
ZZZZZZ	1	12:55																								
ZZZZZZ	10	12:57																								
ZZZZZZ	1	12:59																								
ZZZZZZ	1	13:00																								
ZZZZZZ	1	13:02																								
ZZZZZZ	1	13:04																								
ZZZZZZ	5	13:05																								
ZZZZZZ	1	13:07																								
ZZZZZZ	1	13:09																								
ZZZZZZ	1	13:11																								
CCV13	1	13:12														X										
CCB13	1	13:14														X										
ZZZZZZ	1	13:16																								
ZZZZZZ	1	13:17																								
ZZZZZZ	1	13:19																								
ZZZZZZ	1	13:21																								
ZZZZZZ	1	13:23																								

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	13:24																								
ZZZZZZ	1	13:26																								
ZZZZZZ	1	13:28																								
ZZZZZZ	1	13:29																								
ZZZZZZ	1	13:31																								
CCV14	1	13:33															X									
CCB14	1	13:34															X									
ZZZZZZ	1	13:36																								
ZZZZZZ	1	13:38																								
CCV15	1	13:40															X									
CCB15	1	13:41															X									
ZZZZZZ	2	14:06																								
1202019686	2	14:08															X									
1202019687	2	14:10															X									
1202019689	2	14:11															X									
1202019688	10	14:13															X									
CCV16	1	14:15															X									
CCB16	1	14:16															X									

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 27–JAN–10 **End Date:** 27–JAN–10

Client Sdg: 10–1161–2
Method P
Data File: 012710–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	08:25	X	X		X		X	X				X	X	X	X			X		X	X				X
S0.1	1	08:29		X		X		X						X		X			X		X					X
S0.5	1	08:31	X	X		X		X	X					X	X	X			X		X					X
SCAL	1	08:35	X	X		X		X	X				X	X	X	X			X		X	X				X
S10	1	08:38	X						X				X		X							X				
ICV01	1	08:41	X	X		X		X	X				X	X	X	X			X		X	X				X
ICB01	1	08:44	X	X		X		X	X				X	X	X	X			X		X	X				X
PQL01	1	08:48	X	X		X		X	X				X	X	X	X			X		X	X				X
ICSA01	1	08:52	X	X		X		X	X				X	X	X	X			X		X	X				X
ICSAB01	1	08:54	X	X		X		X	X				X	X	X	X			X		X	X				X
LR01	1	08:57	X	X		X		X	X				X	X	X	X			X		X	X				X
LR02	1	09:00	X	X		X		X	X				X	X	X	X			X		X	X				X
CCV01	1	09:04	X	X		X		X	X				X	X	X	X			X		X	X				X
CCB01	1	09:08	X	X		X		X	X				X	X	X	X			X		X	X				X
LR03	1	09:16	X	X		X		X	X				X	X	X	X			X		X	X				X
CCV02	1	09:20	X	X		X		X	X				X	X	X	X			X		X	X				X
CCB02	1	09:24	X	X		X		X	X				X	X	X	X			X		X	X				X
1202011874	1	09:30	X	X		X		X	X				X	X	X	X			X		X	X				X
1202011875	1	09:34	X	X		X		X	X				X	X	X	X			X		X	X				X
ZZZZZZ	1	09:37																								
1202011876	1	09:40	X	X		X		X	X				X	X	X	X			X		X	X				X
1202011877	1	09:44	X	X		X		X	X				X	X	X	X			X		X	X				X
1202011879	1	09:48	X	X		X		X	X				X	X	X	X			X		X	X				X
1202011878	5	09:51	X	X		X		X	X				X	X	X	X			X		X	X				X
244228001	1	09:55	X	X		X		X	X				X	X	X	X			X		X	X				X
244228002	1	09:59	X	X		X		X	X				X	X	X	X			X		X	X				X
CCV03	1	10:02	X	X		X		X	X				X	X	X	X			X		X	X				X
CCB03	1	10:06	X	X		X		X	X				X	X	X	X			X		X	X				X
244228003	1	10:10	X	X		X		X	X				X	X	X	X			X		X	X				X
244228004	1	10:13	X	X		X		X	X				X	X	X	X			X		X	X				X
244228005	1	10:17	X	X		X		X	X				X	X	X	X			X		X	X				X
244228006	1	10:21	X	X		X		X	X				X	X	X	X			X		X	X				X
ZZZZZZ	1	10:25																								
ZZZZZZ	1	10:28																								
ZZZZZZ	1	10:32																								
ZZZZZZ	1	10:36																								
ZZZZZZ	1	10:39																								
CCV04	1	10:43	X	X		X		X	X				X	X	X	X			X		X	X				X
CCB04	1	10:47	X	X		X		X	X				X	X	X	X			X		X	X				X

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–1161–2

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1161-2

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1161-2

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-1161-2
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-2
Effective Dates: 01-NOV-09

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.85580	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.44491	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-2
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-2
Effective Dates: 01-NOV-09

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.63547	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.37026	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-2
Effective Dates: 01-NOV-09

Parmname	Wavelength	Silver	Strontium	Sulfur	Thallium	Tin
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-15.4932
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	-9.37529
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-2
Effective Dates: 01-NOV-09

Parmname	Wavelength	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.55360	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.81635	-4.04400	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-1161-2
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.05500	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.28800	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.04600	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-1161-2
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	11.3250	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	-1.59900	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-21.2250	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.68400
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	1.19100	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	105.59
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	3.36300	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	-2.30400	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.61100

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-2
Effective Dates: 01-NOV-09

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	20.5430
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-16.3320
Arsenic	188.979	-0.05800	0.00000	0.00000	0.00000	1.97700
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.13300	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-0.90500
Copper	324.752	-0.13900	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.03800	-2.87600	0.00000	0.00000	0.00000
Magnesium	279.077	1.07300	0.00000	0.00000	0.00000	-16.8110
Manganese	257.61	-0.13900	0.00000	0.04000	0.00000	0.00000
Molybdenum	202.031	-0.03800	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	-0.01300	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.81200	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.88200	0.00000	0.28200	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.06300	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.03900	0.00000	0.00000	-4.11700	0.00000
Tin	189.927	-0.09200	0.00000	-0.19600	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.07900	0.00000	0.00000
Uranium	409.014	0.13900	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.05300	0.00000	0.00000	0.00000	-7.71400
Zinc	213.857	0.14460	0.00000	0.02030	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10–1161–2
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01–NOV–09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	–0.99900	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	4.41600	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-1161-2
Contract: LANL01004
Instrument: OPTIMA1
Effective Dates: 01-NOV-09
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.38100	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08700	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.04000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-14.8110	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-8.68900	-1.22400
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.03900
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1161-2
Effective Dates: 01-NOV-09

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-1.80500	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-0.63000	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.59800	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1161-2

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS6

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01-NOV-09
Antimony	1000	250	ug/L	01-NOV-09
Arsenic	1000	1000	ug/L	01-NOV-09
Barium	1000	1000	ug/L	01-NOV-09
Beryllium	1000	1000	ug/L	01-NOV-09
Cadmium	1000	1000	ug/L	01-NOV-09
Calcium	500	50000	ug/L	01-NOV-09
Chromium	1000	1000	ug/L	01-NOV-09
Cobalt	1000	1000	ug/L	01-NOV-09
Copper	1000	1000	ug/L	01-NOV-09
Iron	500	50000	ug/L	01-NOV-09
Lead	1000	5000	ug/L	01-NOV-09
Magnesium	1	50000	ug/L	01-NOV-09
Manganese	1000	1000	ug/L	01-NOV-09
Nickel	1000	1000	ug/L	01-NOV-09
Potassium	1	50000	ug/L	01-NOV-09
Selenium	1000	500	ug/L	01-NOV-09
Silver	1000	250	ug/L	01-NOV-09
Sodium	1	50000	ug/L	01-NOV-09
Thallium	1000	500	ug/L	01-NOV-09
Uranium	1000	5000	ug/L	01-NOV-09
Vanadium	1000	100	ug/L	01-NOV-09
Zinc	1000	2500	ug/L	01-NOV-09

METALS
-12-
Linear Ranges

SDG NO. 10-1161-2

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Calcium	20	500000	ug/L	01-NOV-09
Chromium	20	25000	ug/L	01-NOV-09
Cobalt	20	10000	ug/L	01-NOV-09
Copper	20	20000	ug/L	01-NOV-09
Iron	20	500000	ug/L	01-NOV-09
Lead	20	25000	ug/L	01-NOV-09
Magnesium	20	500000	ug/L	01-NOV-09
Manganese	20	10000	ug/L	01-NOV-09
Nickel	20	10000	ug/L	01-NOV-09
Potassium	20	300000	ug/L	01-NOV-09
Selenium	20	10000	ug/L	01-NOV-09
Silver	20	1000	ug/L	01-NOV-09
Sodium	20	500000	ug/L	01-NOV-09
Thallium	20	10000	ug/L	01-NOV-09
Uranium	20	15000	ug/L	01-NOV-09
Vanadium	20	10000	ug/L	01-NOV-09
Zinc	20	15000	ug/L	01-NOV-09
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09
Arsenic	20	10000	ug/L	01-NOV-09
Barium	20	15000	ug/L	01-NOV-09
Beryllium	20	3000	ug/L	01-NOV-09
Cadmium	20	10000	ug/L	01-NOV-09

METALS
–12–
Linear Ranges

SDG NO. 10–1161–2

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	01–NOV–09
Antimony	20	10000	ug/L	01–NOV–09
Arsenic	20	10000	ug/L	01–NOV–09
Barium	20	15000	ug/L	01–NOV–09
Beryllium	20	3000	ug/L	01–NOV–09
Cadmium	20	10000	ug/L	01–NOV–09
Calcium	20	500000	ug/L	01–NOV–09
Chromium	20	25000	ug/L	01–NOV–09
Cobalt	20	10000	ug/L	01–NOV–09
Copper	20	20000	ug/L	01–NOV–09
Iron	20	500000	ug/L	01–NOV–09
Lead	20	25000	ug/L	01–NOV–09
Magnesium	20	500000	ug/L	01–NOV–09
Manganese	20	10000	ug/L	01–NOV–09
Nickel	20	10000	ug/L	01–NOV–09
Potassium	20	300000	ug/L	01–NOV–09
Selenium	20	10000	ug/L	01–NOV–09
Silver	20	1000	ug/L	01–NOV–09
Sodium	20	500000	ug/L	01–NOV–09
Thallium	20	10000	ug/L	01–NOV–09
Uranium	20	15000	ug/L	01–NOV–09
Vanadium	20	10000	ug/L	01–NOV–09
Zinc	20	15000	ug/L	01–NOV–09

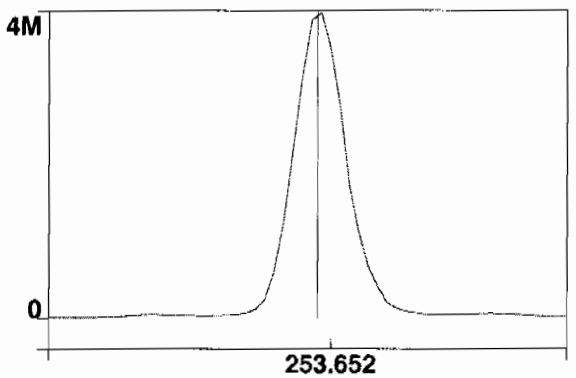
Raw Data

Method: Hg_ReAlign
Result: 020310

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



Intensity: 3997755.0 cps
Conc:

1

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Analysis Begun

Start Time: 1/27/2010 08:25:13 Plasma On Time: 1/25/2010 05:31:26
Logged In Analyst: optima Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\012710.sif
Batch ID:
Results Data Set: 012710
Results Library: c:\pe\optima1\Results\Results.mdb

==========

Sequence No.: 1 Autosampler Location: 8
Sample ID: S0 Date Collected: 1/27/2010 08:25:14
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	77232.1	77232.1	0.000	%	08:25:59
1	Al 396.153Radial†	-32.1	-31.9	[0.00]	µg/L	08:25:59
1	Ca 317.933Radial†	251.4	250.0	[0.00]	µg/L	08:26:19
1	Fe 238.204 Radial†	13.5	13.4	[0.00]	µg/L	08:26:19
1	K 766.490 Radial†	412.4	410.2	[0.00]	µg/L	08:25:59
1	Mg 279.077 IEC†	8.5	8.5	[0.00]	µg/L	08:26:19
1	Na 589.592 Radial†	575.3	572.2	[0.00]	µg/L	08:25:59
1	Sr 421.552†	552.9	550.0	[0.00]	µg/L	08:25:59
1	Sc 361.383	1948536.9	1948536.9	0.0000	%	08:27:22
1	Y 371.029	1231872.8	1231872.8	0.0000	%	08:27:22
1	Ag 328.068†	-43.6	-43.5	[0.00]	µg/L	08:27:27
1	As 188.979†	0.7	0.7	[0.00]	µg/L	08:27:48
1	B 249.677†	122.7	122.3	[0.00]	µg/L	08:27:48
1	Ba 233.527†	-13.2	-13.2	[0.00]	µg/L	08:27:48
1	Be 313.107†	3810.4	3800.4	[0.00]	µg/L	08:27:27
1	Cd 226.502†	-138.1	-137.7	[0.00]	µg/L	08:27:48
1	Co 228.616†	-38.2	-38.1	[0.00]	µg/L	08:27:48
1	Cr 267.716†	-76.3	-76.1	[0.00]	µg/L	08:27:27
1	Cu 324.752†	3651.3	3641.7	[0.00]	µg/L	08:27:27
1	Mn 257.610†	-188.8	-188.3	[0.00]	µg/L	08:27:48
1	Mo 202.031†	14.3	14.3	[0.00]	µg/L	08:27:48
1	Ni 231.604†	333.6	332.7	[0.00]	µg/L	08:27:48
1	P 214.914†	206.9	206.3	[0.00]	µg/L	08:27:48
1	Pb 220.353†	55.7	55.5	[0.00]	µg/L	08:27:48
1	S 181.975 Axial†	24.1	24.0	[0.00]	µg/L	08:27:48
1	Sb 206.836†	25.0	24.9	[0.00]	µg/L	08:27:48
1	Se 196.026†	10.1	10.0	[0.00]	µg/L	08:27:48
1	SiO2†	2259.5	2253.5	[0.00]	µg/L	08:27:27
1	Si 251.611†	299.5	298.7	[0.00]	µg/L	08:27:48
1	Sn 189.927†	19.5	19.4	[0.00]	µg/L	08:27:48
1	Ti 334.940†	789.1	787.0	[0.00]	µg/L	08:27:27
1	Tl 190.801†	-23.6	-23.5	[0.00]	µg/L	08:27:48
1	U 409.014†	-136.1	-135.8	[0.00]	µg/L	08:27:27
1	V 292.402†	-142.0	-141.6	[0.00]	µg/L	08:27:27
1	Zn 213.857†	669.9	668.1	[0.00]	µg/L	08:27:48
2	Sc RADIAL	76797.7	76797.7	0.000	%	08:26:25
2	Al 396.153Radial†	-27.5	-27.5	[0.00]	µg/L	08:26:25
2	Ca 317.933Radial†	248.5	248.6	[0.00]	µg/L	08:26:45
2	Fe 238.204 Radial†	16.8	16.8	[0.00]	µg/L	08:26:45
2	K 766.490 Radial†	435.8	435.9	[0.00]	µg/L	08:26:25
2	Mg 279.077 IEC†	7.1	7.1	[0.00]	µg/L	08:26:45
2	Na 589.592 Radial†	528.0	528.1	[0.00]	µg/L	08:26:25
2	Sr 421.552†	560.8	561.0	[0.00]	µg/L	08:26:25
2	Sc 361.383	1941419.5	1941419.5	0.0000	%	08:27:54
2	Y 371.029	1227667.8	1227667.8	0.0000	%	08:27:54
2	Ag 328.068†	-56.2	-56.2	[0.00]	µg/L	08:27:59
2	As 188.979†	0.0	0.0	[0.00]	µg/L	08:28:20

2	B 249.677†	113.1	113.2	[0.00]	µg/L	08:28:20
2	Ba 233.527†	-17.8	-17.8	[0.00]	µg/L	08:28:20
2	Be 313.107†	3869.2	3873.1	[0.00]	µg/L	08:27:59
2	Cd 226.502†	-133.9	-134.0	[0.00]	µg/L	08:28:20
2	Co 228.616†	-53.9	-54.0	[0.00]	µg/L	08:28:20
2	Cr 267.716†	-104.0	-104.1	[0.00]	µg/L	08:27:59
2	Cu 324.752†	3694.4	3698.1	[0.00]	µg/L	08:27:59
2	Mn 257.610†	-185.6	-185.8	[0.00]	µg/L	08:28:20
2	Mo 202.031†	17.3	17.3	[0.00]	µg/L	08:28:20
2	Ni 231.604†	332.9	333.2	[0.00]	µg/L	08:28:20
2	P 214.914†	201.8	202.0	[0.00]	µg/L	08:28:20
2	Pb 220.353†	62.3	62.4	[0.00]	µg/L	08:28:20
2	S 181.975 Axial†	23.6	23.7	[0.00]	µg/L	08:28:20
2	Sb 206.836†	21.6	21.6	[0.00]	µg/L	08:28:20
2	Se 196.026†	15.5	15.5	[0.00]	µg/L	08:28:20
2	SiO2†	2290.6	2292.9	[0.00]	µg/L	08:27:59
2	Si 251.611†	310.5	310.8	[0.00]	µg/L	08:28:20
2	Sn 189.927†	27.2	27.2	[0.00]	µg/L	08:28:20
2	Ti 334.940†	796.3	797.1	[0.00]	µg/L	08:27:59
2	Tl 190.801†	-22.7	-22.7	[0.00]	µg/L	08:28:20
2	U 409.014†	-232.0	-232.2	[0.00]	µg/L	08:27:59
2	V 292.402†	-97.1	-97.2	[0.00]	µg/L	08:27:59
2	Zn 213.857†	667.1	667.8	[0.00]	µg/L	08:28:20
3	Sc RADIAL	76429.2	76429.2	0.000	%	08:26:51
3	Al 396.153Radial†	-24.3	-24.5	[0.00]	µg/L	08:26:51
3	Ca 317.933Radial†	255.1	256.4	[0.00]	µg/L	08:27:11
3	Fe 238.204 Radial†	17.3	17.4	[0.00]	µg/L	08:27:11
3	K 766.490 Radial†	387.9	389.9	[0.00]	µg/L	08:26:51
3	Mg 279.077 IEC†	9.3	9.3	[0.00]	µg/L	08:27:11
3	Na 589.592 Radial†	531.8	534.5	[0.00]	µg/L	08:26:51
3	Sr 421.552†	559.3	562.1	[0.00]	µg/L	08:26:51
3	Sc 361.383	1940224.9	1940224.9	0.0000	%	08:28:26
3	Y 371.029	1226856.6	1226856.6	0.0000	%	08:28:26
3	Ag 328.068†	-65.4	-65.5	[0.00]	µg/L	08:28:31
3	As 188.979†	0.9	0.9	[0.00]	µg/L	08:28:52
3	B 249.677†	109.9	110.0	[0.00]	µg/L	08:28:52
3	Ba 233.527†	-12.5	-12.6	[0.00]	µg/L	08:28:52
3	Be 313.107†	3838.5	3844.8	[0.00]	µg/L	08:28:31
3	Cd 226.502†	-134.5	-134.7	[0.00]	µg/L	08:28:52
3	Co 228.616†	-42.8	-42.9	[0.00]	µg/L	08:28:52
3	Cr 267.716†	-68.0	-68.2	[0.00]	µg/L	08:28:31
3	Cu 324.752†	3658.8	3664.8	[0.00]	µg/L	08:28:31
3	Mn 257.610†	-194.1	-194.4	[0.00]	µg/L	08:28:52
3	Mo 202.031†	20.0	20.0	[0.00]	µg/L	08:28:52
3	Ni 231.604†	339.8	340.3	[0.00]	µg/L	08:28:52
3	P 214.914†	198.8	199.1	[0.00]	µg/L	08:28:52
3	Pb 220.353†	49.8	49.9	[0.00]	µg/L	08:28:52
3	S 181.975 Axial†	28.8	28.9	[0.00]	µg/L	08:28:52
3	Sb 206.836†	20.6	20.6	[0.00]	µg/L	08:28:52
3	Se 196.026†	11.7	11.7	[0.00]	µg/L	08:28:52
3	SiO2†	2286.1	2289.9	[0.00]	µg/L	08:28:31
3	Si 251.611†	303.5	304.0	[0.00]	µg/L	08:28:52
3	Sn 189.927†	23.6	23.6	[0.00]	µg/L	08:28:52
3	Ti 334.940†	735.7	736.9	[0.00]	µg/L	08:28:31
3	Tl 190.801†	-23.0	-23.0	[0.00]	µg/L	08:28:52
3	U 409.014†	-330.4	-330.9	[0.00]	µg/L	08:28:31
3	V 292.402†	-127.4	-127.6	[0.00]	µg/L	08:28:31
3	Zn 213.857†	677.0	678.1	[0.00]	µg/L	08:28:52

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	1943393.8	4493.97	0.23%	0.0000	%
Sc RADIAL	76819.7	401.92	0.52%	0.000	%
Y 371.029	1228799.0	2692.65	0.22%	0.0000	%
Ag 328.068†	-55.1	11.07	20.10%	[0.00]	µg/L
Al 396.153Radial†	-28.0	3.74	13.40%	[0.00]	µg/L
As 188.979†	0.6	0.45	80.85%	[0.00]	µg/L
B 249.677†	115.2	6.39	5.55%	[0.00]	µg/L
Ba 233.527†	-14.5	2.85	19.63%	[0.00]	µg/L

Be 313.107†	3839.4	36.65	0.95%	[0.00]	µg/L
Ca 317.933Radial†	251.7	4.15	1.65%	[0.00]	µg/L
Cd 226.502†	-135.5	1.97	1.46%	[0.00]	µg/L
Co 228.616†	-45.0	8.12	18.05%	[0.00]	µg/L
Cr 267.716†	-82.8	18.89	22.82%	[0.00]	µg/L
Cu 324.752†	3668.2	28.38	0.77%	[0.00]	µg/L
Fe 238.204 Radial†	15.9	2.13	13.42%	[0.00]	µg/L
K 766.490 Radial†	412.0	23.06	5.60%	[0.00]	µg/L
Mg 279.077 IEC†	8.3	1.11	13.39%	[0.00]	µg/L
Mn 257.610†	-189.5	4.42	2.33%	[0.00]	µg/L
Mo 202.031†	17.2	2.86	16.62%	[0.00]	µg/L
Na 589.592 Radial†	544.9	23.82	4.37%	[0.00]	µg/L
Ni 231.604†	335.4	4.26	1.27%	[0.00]	µg/L
P 214.914†	202.5	3.63	1.79%	[0.00]	µg/L
Pb 220.353†	55.9	6.26	11.19%	[0.00]	µg/L
S 181.975 Axial†	25.5	2.90	11.37%	[0.00]	µg/L
Sb 206.836†	22.4	2.26	10.08%	[0.00]	µg/L
Se 196.026†	12.4	2.78	22.39%	[0.00]	µg/L
SiO2†	2278.8	21.91	0.96%	[0.00]	µg/L
Si 251.611†	304.5	6.10	2.00%	[0.00]	µg/L
Sn 189.927†	23.4	3.90	16.65%	[0.00]	µg/L
Sr 421.552†	557.7	6.70	1.20%	[0.00]	µg/L
Ti 334.940†	773.7	32.23	4.17%	[0.00]	µg/L
Tl 190.801†	-23.1	0.41	1.76%	[0.00]	µg/L
U 409.014†	-233.0	97.55	41.87%	[0.00]	µg/L
V 292.402†	-122.1	22.68	18.57%	[0.00]	µg/L
Zn 213.857†	671.3	5.87	0.87%	[0.00]	µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/27/2010 08:29:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	78569.0	78569.0	102	%	08:29:36
1	K 766.490 Radial†	1868.6	1415.0	[1000]	µg/L	08:29:36
1	Sr 421.552†	16590.2	15663.1	[100]	µg/L	08:29:36
1	Sc 361.383	1938827.9	1938827.9	99.765	%	08:29:58
1	Y 371.029	1224834.0	1224834.0	99.677	%	08:29:58
1	Ag 328.068†	10845.5	10926.1	[100]	µg/L	08:30:04
1	As 188.979†	45.7	45.3	[100]	µg/L	08:30:24
1	B 249.677†	2162.8	2052.7	[100]	µg/L	08:30:04
1	Ba 233.527†	3476.1	3498.8	[100]	µg/L	08:30:04
1	Be 313.107†	147785.1	144293.7	[100]	µg/L	08:29:58
1	Cd 226.502†	3334.4	3477.7	[100]	µg/L	08:30:04
1	Co 228.616†	1808.3	1857.5	[100]	µg/L	08:30:24
1	Cr 267.716†	4331.2	4424.2	[100]	µg/L	08:30:04
1	Cu 324.752†	17403.4	13776.2	[100]	µg/L	08:30:04
1	Mn 257.610†	27174.1	27427.5	[100]	µg/L	08:30:04
1	Mo 202.031†	842.9	827.6	[100]	µg/L	08:30:24
1	Ni 231.604†	1956.7	1625.8	[100]	µg/L	08:30:24
1	P 214.914†	414.2	212.7	[500]	µg/L	08:30:24
1	Pb 220.353†	415.9	360.9	[100]	µg/L	08:30:24
1	S 181.975 Axial†	60.8	35.4	[200]	µg/L	08:30:24
1	Sb 206.836†	124.0	101.9	[100]	µg/L	08:30:24
1	Se 196.026†	75.8	63.5	[100]	µg/L	08:30:24
1	SiO2†	7379.4	5118.0	[1069.5]	µg/L	08:30:04
1	Si 251.611†	6303.9	6014.2	[500]	µg/L	08:30:04
1	Sn 189.927†	201.2	178.2	[100]	µg/L	08:30:24
1	Ti 334.940†	40467.4	39789.1	[100]	µg/L	08:30:04
1	Tl 190.801†	37.7	60.8	[100]	µg/L	08:30:24
1	U 409.014†	837.2	1072.2	[100]	µg/L	08:30:04
1	V 292.402†	8069.1	8210.2	[100]	µg/L	08:30:04
1	Zn 213.857†	4190.3	3528.8	[100]	µg/L	08:30:04
2	Sc RADIAL	78405.0	78405.0	102	%	08:29:42
2	K 766.490 Radial†	1884.2	1434.1	[1000]	µg/L	08:29:42
2	Sr 421.552†	16566.3	15673.7	[100]	µg/L	08:29:42
2	Sc 361.383	1955896.1	1955896.1	100.64	%	08:30:30
2	Y 371.029	1237762.5	1237762.5	100.73	%	08:30:30
2	Ag 328.068†	10821.0	10806.9	[100]	µg/L	08:30:36
2	As 188.979†	45.4	44.6	[100]	µg/L	08:30:56
2	B 249.677†	2156.2	2027.2	[100]	µg/L	08:30:36
2	Ba 233.527†	3472.6	3464.9	[100]	µg/L	08:30:36
2	Be 313.107†	148254.9	143467.9	[100]	µg/L	08:30:30
2	Cd 226.502†	3334.0	3448.2	[100]	µg/L	08:30:36
2	Co 228.616†	1791.9	1825.5	[100]	µg/L	08:30:56
2	Cr 267.716†	4363.2	4418.1	[100]	µg/L	08:30:36
2	Cu 324.752†	17317.0	13538.1	[100]	µg/L	08:30:36
2	Mn 257.610†	27125.2	27141.3	[100]	µg/L	08:30:36
2	Mo 202.031†	836.7	814.1	[100]	µg/L	08:30:56
2	Ni 231.604†	1979.1	1631.0	[100]	µg/L	08:30:56
2	P 214.914†	425.5	220.3	[500]	µg/L	08:30:56
2	Pb 220.353†	411.7	353.1	[100]	µg/L	08:30:56
2	S 181.975 Axial†	59.2	33.3	[200]	µg/L	08:30:56
2	Sb 206.836†	124.9	101.7	[100]	µg/L	08:30:56
2	Se 196.026†	70.3	57.4	[100]	µg/L	08:30:56
2	SiO2†	7371.7	5045.8	[1069.5]	µg/L	08:30:36
2	Si 251.611†	6277.1	5932.4	[500]	µg/L	08:30:36
2	Sn 189.927†	203.8	179.1	[100]	µg/L	08:30:56
2	Ti 334.940†	40326.4	39294.9	[100]	µg/L	08:30:36
2	Tl 190.801†	40.7	63.5	[100]	µg/L	08:30:56
2	U 409.014†	808.1	1035.9	[100]	µg/L	08:30:36
2	V 292.402†	8058.1	8128.7	[100]	µg/L	08:30:36

2	Zn 213.857†	4190.0	3491.9	[100]	µg/L	08:30:36
3	Sc RADIAL	78492.0	78492.0	102	%	08:29:47
3	K 766.490 Radial†	1831.6	1380.6	[1000]	µg/L	08:29:47
3	Sr 421.552†	16597.8	15686.5	[100]	µg/L	08:29:47
3	Sc 361.383	1962005.4	1962005.4	100.96	%	08:31:03
3	Y 371.029	1239103.3	1239103.3	100.84	%	08:31:03
3	Ag 328.068†	11001.4	10952.1	[100]	µg/L	08:31:08
3	As 188.979†	46.3	45.4	[100]	µg/L	08:31:29
3	B 249.677†	2171.4	2035.6	[100]	µg/L	08:31:08
3	Ba 233.527†	3541.9	3522.9	[100]	µg/L	08:31:08
3	Be 313.107†	149152.3	143898.0	[100]	µg/L	08:31:03
3	Cd 226.502†	3401.8	3505.0	[100]	µg/L	08:31:08
3	Co 228.616†	1804.5	1832.4	[100]	µg/L	08:31:29
3	Cr 267.716†	4442.2	4482.8	[100]	µg/L	08:31:08
3	Cu 324.752†	17549.8	13715.1	[100]	µg/L	08:31:08
3	Mn 257.610†	27511.1	27439.6	[100]	µg/L	08:31:08
3	Mo 202.031†	838.9	813.8	[100]	µg/L	08:31:29
3	Ni 231.604†	1975.4	1621.3	[100]	µg/L	08:31:29
3	P 214.914†	409.6	203.3	[500]	µg/L	08:31:29
3	Pb 220.353†	420.0	360.1	[100]	µg/L	08:31:29
3	S 181.975 Axial†	56.5	30.4	[200]	µg/L	08:31:29
3	Sb 206.836†	117.8	94.3	[100]	µg/L	08:31:29
3	Se 196.026†	78.1	64.9	[100]	µg/L	08:31:29
3	SiO2†	7490.7	5140.8	[1069.5]	µg/L	08:31:08
3	Si 251.611†	6404.6	6039.4	[500]	µg/L	08:31:08
3	Sn 189.927†	202.3	176.9	[100]	µg/L	08:31:29
3	Ti 334.940†	40959.1	39796.9	[100]	µg/L	08:31:08
3	Tl 190.801†	34.9	57.6	[100]	µg/L	08:31:29
3	U 409.014†	795.0	1020.4	[100]	µg/L	08:31:08
3	V 292.402†	8153.4	8198.2	[100]	µg/L	08:31:08
3	Zn 213.857†	4244.2	3532.6	[100]	µg/L	08:31:08

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1952243.1	12012.81	0.62%	100.46	%
Sc RADIAL	78488.7	82.09	0.10%	102	%
Y 371.029	1233899.9	7879.88	0.64%	100.42	%
Ag 328.068†	10895.0	77.45	0.71%	[100]	µg/L
As 188.979†	45.1	0.43	0.95%	[100]	µg/L
B 249.677†	2038.5	13.00	0.64%	[100]	µg/L
Ba 233.527†	3495.5	29.10	0.83%	[100]	µg/L
Be 313.107†	143886.5	413.05	0.29%	[100]	µg/L
Cd 226.502†	3476.9	28.42	0.82%	[100]	µg/L
Co 228.616†	1838.5	16.88	0.92%	[100]	µg/L
Cr 267.716†	4441.7	35.72	0.80%	[100]	µg/L
Cu 324.752†	13676.5	123.67	0.90%	[100]	µg/L
K 766.490 Radial†	1409.9	27.13	1.92%	[1000]	µg/L
Mn 257.610†	27336.2	168.88	0.62%	[100]	µg/L
Mo 202.031†	818.5	7.91	0.97%	[100]	µg/L
Ni 231.604†	1626.1	4.88	0.30%	[100]	µg/L
P 214.914†	212.1	8.53	4.02%	[500]	µg/L
Pb 220.353†	358.1	4.30	1.20%	[100]	µg/L
S 181.975 Axial†	33.0	2.50	7.56%	[200]	µg/L
Sb 206.836†	99.3	4.34	4.37%	[100]	µg/L
Se 196.026†	62.0	3.99	6.44%	[100]	µg/L
SiO2†	5101.6	49.61	0.97%	[1069.5]	µg/L
Si 251.611†	5995.3	55.91	0.93%	[500]	µg/L
Sn 189.927†	178.1	1.10	0.62%	[100]	µg/L
Sr 421.552†	15674.4	11.69	0.07%	[100]	µg/L
Ti 334.940†	39627.0	287.58	0.73%	[100]	µg/L
Tl 190.801†	60.7	2.95	4.86%	[100]	µg/L
U 409.014†	1042.8	26.57	2.55%	[100]	µg/L
V 292.402†	8179.0	44.01	0.54%	[100]	µg/L
Zn 213.857†	3517.8	22.50	0.64%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 1/27/2010 08:31:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	78938.0	78938.0	103	%	08:32:11
1	Al 396.153Radial†	7457.1	7285.0	[5000]	µg/L	08:32:11
1	Ca 317.933Radial†	6883.7	6447.3	[5000]	µg/L	08:32:31
1	K 766.490 Radial†	8134.2	7503.9	[5000]	µg/L	08:32:11
1	Mg 279.077 IEC†	495.8	474.2	[5000]	µg/L	08:32:31
1	Sr 421.552†	81896.5	79141.0	[500]	µg/L	08:32:11
1	Sc 361.383	1968655.2	1968655.2	101.30	%	08:33:34
1	Y 371.029	1242104.6	1242104.6	101.08	%	08:33:34
1	Ag 328.068†	55330.9	54676.0	[500]	µg/L	08:33:40
1	As 188.979†	227.8	224.3	[500]	µg/L	08:34:00
1	B 249.677†	10672.2	10420.1	[500]	µg/L	08:33:40
1	Ba 233.527†	17883.6	17668.7	[500]	µg/L	08:33:40
1	Be 313.107†	751946.4	738458.1	[500]	µg/L	08:33:34
1	Cd 226.502†	17559.9	17470.1	[500]	µg/L	08:33:40
1	Co 228.616†	9396.0	9320.5	[500]	µg/L	08:33:40
1	Cr 267.716†	22430.1	22225.1	[500]	µg/L	08:33:40
1	Cu 324.752†	72871.0	68267.7	[500]	µg/L	08:33:40
1	Mn 257.610†	138098.1	136515.6	[500]	µg/L	08:33:40
1	Mo 202.031†	4155.4	4084.9	[500]	µg/L	08:34:00
1	Ni 231.604†	8600.4	8154.6	[500]	µg/L	08:33:40
1	P 214.914†	1314.3	1094.9	[2500]	µg/L	08:34:00
1	Pb 220.353†	1870.4	1790.5	[500]	µg/L	08:34:00
1	S 181.975 Axial†	206.0	177.9	[1000]	µg/L	08:34:00
1	Sb 206.836†	489.2	460.5	[500]	µg/L	08:34:00
1	Se 196.026†	338.2	321.5	[500]	µg/L	08:34:00
1	SiO2†	28755.0	26107.2	[5347.5]	µg/L	08:33:40
1	Si 251.611†	31391.2	30683.9	[2500]	µg/L	08:33:40
1	Sn 189.927†	942.0	906.5	[500]	µg/L	08:34:00
1	Ti 334.940†	209697.9	206233.4	[500]	µg/L	08:33:34
1	Tl 190.801†	280.4	299.9	[500]	µg/L	08:34:00
1	U 409.014†	5155.7	5322.5	[500]	µg/L	08:33:40
1	V 292.402†	41855.5	41440.5	[500]	µg/L	08:33:40
1	Zn 213.857†	18535.8	17626.7	[500]	µg/L	08:33:40
2	Sc RADIAL	78548.1	78548.1	102	%	08:32:37
2	Al 396.153Radial†	7433.0	7297.4	[5000]	µg/L	08:32:37
2	Ca 317.933Radial†	6832.3	6430.3	[5000]	µg/L	08:32:57
2	K 766.490 Radial†	8107.9	7517.5	[5000]	µg/L	08:32:37
2	Mg 279.077 IEC†	487.5	468.5	[5000]	µg/L	08:32:57
2	Sr 421.552†	81515.8	79164.5	[500]	µg/L	08:32:37
2	Sc 361.383	1972139.4	1972139.4	101.48	%	08:34:07
2	Y 371.029	1242750.3	1242750.3	101.14	%	08:34:07
2	Ag 328.068†	55470.7	54717.2	[500]	µg/L	08:34:13
2	As 188.979†	229.3	225.4	[500]	µg/L	08:34:33
2	B 249.677†	10709.2	10437.9	[500]	µg/L	08:34:13
2	Ba 233.527†	17898.8	17652.4	[500]	µg/L	08:34:13
2	Be 313.107†	744397.6	729708.0	[500]	µg/L	08:34:07
2	Cd 226.502†	17652.9	17531.1	[500]	µg/L	08:34:13
2	Co 228.616†	9423.6	9331.3	[500]	µg/L	08:34:13
2	Cr 267.716†	22551.2	22305.3	[500]	µg/L	08:34:13
2	Cu 324.752†	73127.2	68393.1	[500]	µg/L	08:34:13
2	Mn 257.610†	138444.4	136616.0	[500]	µg/L	08:34:13
2	Mo 202.031†	4182.0	4103.8	[500]	µg/L	08:34:33
2	Ni 231.604†	8656.8	8195.2	[500]	µg/L	08:34:13
2	P 214.914†	1313.5	1091.8	[2500]	µg/L	08:34:33
2	Pb 220.353†	1879.7	1796.3	[500]	µg/L	08:34:33
2	S 181.975 Axial†	207.5	179.0	[1000]	µg/L	08:34:33
2	Sb 206.836†	515.1	485.2	[500]	µg/L	08:34:33
2	Se 196.026†	335.4	318.1	[500]	µg/L	08:34:33
2	SiO2†	28776.8	26078.6	[5347.5]	µg/L	08:34:13

2	Si 251.611†	31526.6	30762.5	[2500]	µg/L	08:34:13
2	Sn 189.927†	941.7	904.5	[500]	µg/L	08:34:33
2	Ti 334.940†	207775.3	203973.1	[500]	µg/L	08:34:07
2	Tl 190.801†	283.9	302.8	[500]	µg/L	08:34:33
2	U 409.014†	5241.3	5397.9	[500]	µg/L	08:34:13
2	V 292.402†	41944.0	41454.7	[500]	µg/L	08:34:13
2	Zn 213.857†	18588.0	17645.7	[500]	µg/L	08:34:13
3	Sc RADIAL	78235.1	78235.1	102	%	08:33:03
3	Al 396.153Radial†	7408.9	7302.8	[5000]	µg/L	08:33:03
3	Ca 317.933Radial†	6824.7	6449.6	[5000]	µg/L	08:33:23
3	K 766.490 Radial†	8092.9	7534.5	[5000]	µg/L	08:33:03
3	Mg 279.077 IEC†	490.0	472.9	[5000]	µg/L	08:33:23
3	Sr 421.552†	81351.5	79322.1	[500]	µg/L	08:33:03
3	Sc 361.383	1952151.4	1952151.4	100.45	%	08:34:40
3	Y 371.029	1232809.8	1232809.8	100.33	%	08:34:40
3	Ag 328.068†	54086.5	53899.0	[500]	µg/L	08:34:46
3	As 188.979†	204.3	202.8	[500]	µg/L	08:35:06
3	B 249.677†	10366.9	10205.1	[500]	µg/L	08:34:46
3	Ba 233.527†	17108.3	17046.1	[500]	µg/L	08:34:46
3	Be 313.107†	725489.3	718395.3	[500]	µg/L	08:34:40
3	Cd 226.502†	16783.2	16843.3	[500]	µg/L	08:34:46
3	Co 228.616†	8943.5	8948.4	[500]	µg/L	08:34:46
3	Cr 267.716†	21136.1	21124.1	[500]	µg/L	08:34:46
3	Cu 324.752†	69734.2	65753.2	[500]	µg/L	08:34:46
3	Mn 257.610†	131446.7	131046.5	[500]	µg/L	08:34:46
3	Mo 202.031†	3698.0	3664.2	[500]	µg/L	08:35:06
3	Ni 231.604†	8247.8	7875.4	[500]	µg/L	08:34:46
3	P 214.914†	1208.6	1000.7	[2500]	µg/L	08:35:06
3	Pb 220.353†	1726.8	1663.1	[500]	µg/L	08:35:06
3	S 181.975 Axial†	194.8	168.4	[1000]	µg/L	08:35:06
3	Sb 206.836†	464.9	440.4	[500]	µg/L	08:35:06
3	Se 196.026†	321.4	307.6	[500]	µg/L	08:35:06
3	SiO2†	27821.3	25417.7	[5347.5]	µg/L	08:34:46
3	Si 251.611†	30403.6	29962.7	[2500]	µg/L	08:34:46
3	Sn 189.927†	829.7	802.6	[500]	µg/L	08:35:06
3	Ti 334.940†	201953.4	200273.7	[500]	µg/L	08:34:40
3	Tl 190.801†	261.6	283.5	[500]	µg/L	08:35:06
3	U 409.014†	4937.6	5148.4	[500]	µg/L	08:34:46
3	V 292.402†	39802.1	39745.7	[500]	µg/L	08:34:46
3	Zn 213.857†	17753.1	17002.2	[500]	µg/L	08:34:46

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1964315.3	10677.38	0.54%	101.08	%
Sc RADIAL	78573.7	352.19	0.45%	102	%
Y 371.029	1239221.5	5562.12	0.45%	100.85	%
Ag 328.068†	54430.7	460.99	0.85%	[500]	µg/L
Al 396.153Radial†	7295.1	9.17	0.13%	[5000]	µg/L
As 188.979†	217.5	12.73	5.85%	[500]	µg/L
B 249.677†	10354.4	129.53	1.25%	[500]	µg/L
Ba 233.527†	17455.7	354.87	2.03%	[500]	µg/L
Be 313.107†	728853.8	10058.64	1.38%	[500]	µg/L
Ca 317.933Radial†	6442.4	10.53	0.16%	[5000]	µg/L
Cd 226.502†	17281.5	380.68	2.20%	[500]	µg/L
Co 228.616†	9200.0	218.01	2.37%	[500]	µg/L
Cr 267.716†	21884.8	660.05	3.02%	[500]	µg/L
Cu 324.752†	67471.3	1489.30	2.21%	[500]	µg/L
K 766.490 Radial†	7518.6	15.30	0.20%	[5000]	µg/L
Mg 279.077 IEC†	471.9	3.00	0.64%	[5000]	µg/L
Mn 257.610†	134726.0	3186.95	2.37%	[500]	µg/L
Mo 202.031†	3951.0	248.53	6.29%	[500]	µg/L
Ni 231.604†	8075.1	174.15	2.16%	[500]	µg/L
P 214.914†	1062.5	53.55	5.04%	[2500]	µg/L
Pb 220.353†	1750.0	75.27	4.30%	[500]	µg/L
S 181.975 Axial†	175.1	5.81	3.32%	[1000]	µg/L
Sb 206.836†	462.0	22.41	4.85%	[500]	µg/L
Se 196.026†	315.7	7.25	2.30%	[500]	µg/L
SiO2†	25867.8	390.09	1.51%	[5347.5]	µg/L
Si 251.611†	30469.7	440.83	1.45%	[2500]	µg/L

Sn 189.927†	871.2	59.44	6.82%	[500] µg/L
Sr 421.552†	79209.2	98.45	0.12%	[500] µg/L
Ti 334.940†	203493.4	3008.65	1.48%	[500] µg/L
Tl 190.801†	295.4	10.42	3.53%	[500] µg/L
U 409.014†	5289.6	127.98	2.42%	[500] µg/L
V 292.402†	40880.3	982.64	2.40%	[500] µg/L
Zn 213.857†	17424.9	366.19	2.10%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 1/27/2010 08:35:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	78758.1	78758.1	103	%	08:35:48
1	Al 396.153Radial†	14859.0	14521.2	[10000]	µg/L	08:35:48
1	Ca 317.933Radial†	13454.0	12871.2	[10000]	µg/L	08:35:48
1	Fe 238.204 Radial†	726.2	692.4	[10000]	µg/L	08:36:09
1	K 766.490 Radial†	15902.8	15099.4	[10000]	µg/L	08:35:48
1	Mg 279.077 IEC†	952.4	920.7	[10000]	µg/L	08:36:09
1	Na 589.592 Radial†	36239.9	34803.1	[10000]	µg/L	08:35:48
1	Sr 421.552†	161516.1	156983.2	[1000]	µg/L	08:35:48
1	Sc 361.383	1968396.8	1968396.8	101.29	%	08:37:13
1	Y 371.029	1238215.3	1238215.3	100.77	%	08:37:13
1	Ag 328.068†	108989.9	107660.6	[1000]	µg/L	08:37:18
1	As 188.979†	459.9	453.5	[1000]	µg/L	08:37:39
1	B 249.677†	21117.7	20734.2	[1000]	µg/L	08:37:18
1	Ba 233.527†	35225.4	34792.4	[1000]	µg/L	08:37:18
1	Be 313.107†	1471640.7	1449108.2	[1000]	µg/L	08:37:13
1	Cd 226.502†	34644.6	34340.0	[1000]	µg/L	08:37:18
1	Co 228.616†	18595.2	18404.0	[1000]	µg/L	08:37:18
1	Cr 267.716†	44517.9	44035.2	[1000]	µg/L	08:37:18
1	Cu 324.752†	140490.9	135038.1	[1000]	µg/L	08:37:18
1	Mn 257.610†	278000.7	274659.0	[1000]	µg/L	08:37:13
1	Mo 202.031†	8244.8	8122.9	[1000]	µg/L	08:37:18
1	Ni 231.604†	16671.0	16123.9	[1000]	µg/L	08:37:18
1	P 214.914†	2395.1	2162.1	[5000]	µg/L	08:37:39
1	Pb 220.353†	3644.4	3542.1	[1000]	µg/L	08:37:39
1	S 181.975 Axial†	391.2	360.7	[2000]	µg/L	08:37:39
1	Sb 206.836†	968.3	933.6	[1000]	µg/L	08:37:39
1	Se 196.026†	676.2	655.2	[1000]	µg/L	08:37:39
1	SiO2†	53959.8	50995.6	[10695]	µg/L	08:37:18
1	Si 251.611†	61134.1	60053.1	[5000]	µg/L	08:37:18
1	Sn 189.927†	1842.4	1795.6	[1000]	µg/L	08:37:39
1	Ti 334.940†	411279.3	405281.5	[1000]	µg/L	08:37:13
1	Tl 190.801†	572.3	588.1	[1000]	µg/L	08:37:39
1	U 409.014†	10613.9	10712.0	[1000]	µg/L	08:37:18
1	V 292.402†	82638.5	81711.0	[1000]	µg/L	08:37:18
1	Zn 213.857†	35912.1	34784.6	[1000]	µg/L	08:37:18
2	Sc RADIAL	78683.2	78683.2	102	%	08:36:14
2	Al 396.153Radial†	14798.9	14476.4	[10000]	µg/L	08:36:14
2	Ca 317.933Radial†	13403.8	12834.7	[10000]	µg/L	08:36:14
2	Fe 238.204 Radial†	732.3	699.1	[10000]	µg/L	08:36:35
2	K 766.490 Radial†	15863.8	15076.0	[10000]	µg/L	08:36:14
2	Mg 279.077 IEC†	960.9	929.9	[10000]	µg/L	08:36:35
2	Na 589.592 Radial†	36221.7	34818.9	[10000]	µg/L	08:36:14
2	Sr 421.552†	161122.0	156748.3	[1000]	µg/L	08:36:14
2	Sc 361.383	1961486.2	1961486.2	100.93	%	08:37:46
2	Y 371.029	1234525.6	1234525.6	100.47	%	08:37:46
2	Ag 328.068†	108730.7	107782.9	[1000]	µg/L	08:37:52
2	As 188.979†	455.1	450.3	[1000]	µg/L	08:38:12
2	B 249.677†	21032.5	20723.3	[1000]	µg/L	08:37:52
2	Ba 233.527†	35130.3	34820.8	[1000]	µg/L	08:37:52
2	Be 313.107†	1463671.2	1446331.1	[1000]	µg/L	08:37:46
2	Cd 226.502†	34565.6	34382.2	[1000]	µg/L	08:37:52
2	Co 228.616†	18523.9	18398.1	[1000]	µg/L	08:37:52
2	Cr 267.716†	44412.5	44085.7	[1000]	µg/L	08:37:52
2	Cu 324.752†	140072.0	135111.8	[1000]	µg/L	08:37:52
2	Mn 257.610†	276284.1	273925.1	[1000]	µg/L	08:37:46
2	Mo 202.031†	8216.6	8123.6	[1000]	µg/L	08:37:52
2	Ni 231.604†	16581.5	16093.1	[1000]	µg/L	08:37:52
2	P 214.914†	2393.3	2168.7	[5000]	µg/L	08:38:12
2	Pb 220.353†	3619.5	3530.2	[1000]	µg/L	08:38:12

2	S 181.975 Axial†	386.1	357.0	[2000]	µg/L	08:38:12
2	Sb 206.836†	963.9	932.6	[1000]	µg/L	08:38:12
2	Se 196.026†	668.7	650.1	[1000]	µg/L	08:38:12
2	SiO2†	53848.9	51073.4	[10695]	µg/L	08:37:52
2	Si 251.611†	60903.2	60037.0	[5000]	µg/L	08:37:52
2	Sn 189.927†	1827.3	1787.0	[1000]	µg/L	08:38:12
2	Ti 334.940†	409230.6	404682.2	[1000]	µg/L	08:37:46
2	Tl 190.801†	569.3	587.1	[1000]	µg/L	08:38:12
2	U 409.014†	10631.3	10766.3	[1000]	µg/L	08:37:52
2	V 292.402†	82359.7	81722.1	[1000]	µg/L	08:37:52
2	Zn 213.857†	35797.7	34796.2	[1000]	µg/L	08:37:52
3	Sc RADIAL	78843.3	78843.3	103	%	08:36:40
3	Al 396.153Radial†	14950.8	14595.0	[10000]	µg/L	08:36:40
3	Ca 317.933Radial†	13511.2	12912.8	[10000]	µg/L	08:36:40
3	Fe 238.204 Radial†	730.0	695.4	[10000]	µg/L	08:37:01
3	K 766.490 Radial†	15885.1	15065.4	[10000]	µg/L	08:36:40
3	Mg 279.077 IEC†	961.6	928.6	[10000]	µg/L	08:37:01
3	Na 589.592 Radial†	36393.6	34914.6	[10000]	µg/L	08:36:40
3	Sr 421.552†	162387.5	157661.9	[1000]	µg/L	08:36:40
3	Sc 361.383	1962778.1	1962778.1	101.00	%	08:38:19
3	Y 371.029	1234258.6	1234258.6	100.44	%	08:38:19
3	Ag 328.068†	106148.3	105155.1	[1000]	µg/L	08:38:25
3	As 188.979†	398.9	394.4	[1000]	µg/L	08:38:45
3	B 249.677†	20414.6	20097.8	[1000]	µg/L	08:38:25
3	Ba 233.527†	33578.2	33261.1	[1000]	µg/L	08:38:25
3	Be 313.107†	1411372.9	1393594.8	[1000]	µg/L	08:38:19
3	Cd 226.502†	32912.3	32722.7	[1000]	µg/L	08:38:25
3	Co 228.616†	17461.1	17333.7	[1000]	µg/L	08:38:25
3	Cr 267.716†	41011.8	40689.6	[1000]	µg/L	08:38:25
3	Cu 324.752†	132250.2	127275.9	[1000]	µg/L	08:38:25
3	Mn 257.610†	266785.7	264340.5	[1000]	µg/L	08:38:19
3	Mo 202.031†	7770.6	7676.7	[1000]	µg/L	08:38:25
3	Ni 231.604†	15667.3	15177.2	[1000]	µg/L	08:38:25
3	P 214.914†	2129.6	1906.0	[5000]	µg/L	08:38:45
3	Pb 220.353†	3245.2	3157.2	[1000]	µg/L	08:38:45
3	S 181.975 Axial†	357.6	328.5	[2000]	µg/L	08:38:45
3	Sb 206.836†	856.7	825.8	[1000]	µg/L	08:38:45
3	Se 196.026†	613.6	595.1	[1000]	µg/L	08:38:45
3	SiO2†	51921.6	49130.1	[10695]	µg/L	08:38:25
3	Si 251.611†	58620.8	57737.4	[5000]	µg/L	08:38:25
3	Sn 189.927†	1572.1	1533.2	[1000]	µg/L	08:38:45
3	Ti 334.940†	393216.4	388559.3	[1000]	µg/L	08:38:19
3	Tl 190.801†	539.9	557.6	[1000]	µg/L	08:38:45
3	U 409.014†	9748.6	9885.3	[1000]	µg/L	08:38:25
3	V 292.402†	77420.4	76778.0	[1000]	µg/L	08:38:25
3	Zn 213.857†	33891.9	32885.9	[1000]	µg/L	08:38:25

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1964220.3	3674.09	0.19%	101.07	%
Sc RADIAL	78761.5	80.10	0.10%	103	%
Y 371.029	1235666.5	2211.36	0.18%	100.56	%
Ag 328.068†	106866.2	1483.12	1.39%	[1000]	µg/L
Al 396.153Radial†	14530.8	59.89	0.41%	[10000]	µg/L
As 188.979†	432.7	33.26	7.69%	[1000]	µg/L
B 249.677†	20518.4	364.32	1.78%	[1000]	µg/L
Ba 233.527†	34291.4	892.43	2.60%	[1000]	µg/L
Be 313.107†	1429678.0	31279.80	2.19%	[1000]	µg/L
Ca 317.933Radial†	12872.9	39.09	0.30%	[10000]	µg/L
Cd 226.502†	33814.9	946.16	2.80%	[1000]	µg/L
Co 228.616†	18045.3	616.23	3.41%	[1000]	µg/L
Cr 267.716†	42936.8	1946.32	4.53%	[1000]	µg/L
Cu 324.752†	132475.3	4502.93	3.40%	[1000]	µg/L
Fe 238.204 Radial†	695.6	3.35	0.48%	[10000]	µg/L
K 766.490 Radial†	15080.3	17.38	0.12%	[10000]	µg/L
Mg 279.077 IEC†	926.4	4.98	0.54%	[10000]	µg/L
Mn 257.610†	270974.9	5757.25	2.12%	[1000]	µg/L
Mo 202.031†	7974.4	257.81	3.23%	[1000]	µg/L
Na 589.592 Radial†	34845.5	60.35	0.17%	[10000]	µg/L

Ni 231.604†	15798.0	537.91	3.40%	[1000]	µg/L
P 214.914†	2079.0	149.79	7.21%	[5000]	µg/L
Pb 220.353†	3409.8	218.85	6.42%	[1000]	µg/L
S 181.975 Axial†	348.8	17.63	5.06%	[2000]	µg/L
Sb 206.836†	897.4	61.98	6.91%	[1000]	µg/L
Se 196.026†	633.5	33.33	5.26%	[1000]	µg/L
SiO2†	50399.7	1100.20	2.18%	[10695]	µg/L
Si 251.611†	59275.8	1332.33	2.25%	[5000]	µg/L
Sn 189.927†	1705.3	149.11	8.74%	[1000]	µg/L
Sr 421.552†	157131.1	474.42	0.30%	[1000]	µg/L
Ti 334.940†	399507.7	9486.30	2.37%	[1000]	µg/L
Tl 190.801†	577.6	17.34	3.00%	[1000]	µg/L
U 409.014†	10454.5	493.68	4.72%	[1000]	µg/L
V 292.402†	80070.4	2851.29	3.56%	[1000]	µg/L
Zn 213.857†	34155.5	1099.60	3.22%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/27/2010 08:38:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	77557.9	77557.9	101	%	08:39:27
1	Al 396.153Radial†	73198.7	72530.0	[50000]	µg/L	08:39:27
1	Ca 317.933Radial†	64881.9	64012.6	[50000]	µg/L	08:39:27
1	Fe 238.204 Radial†	1422.2	1392.8	[20000]	µg/L	08:39:47
1	Mg 279.077 IEC†	4635.7	4583.2	[50000]	µg/L	08:39:47
1	Na 589.592 Radial†	71371.3	70147.0	[20000]	µg/L	08:39:27
1	Sc 361.383	1954736.5	1954736.5	100.58	%	08:40:51
1	Y 371.029	1222696.2	1222696.2	99.503	%	08:40:51
2	Sc RADIAL	77462.6	77462.6	101	%	08:39:53
2	Al 396.153Radial†	72227.6	71656.1	[50000]	µg/L	08:39:53
2	Ca 317.933Radial†	63940.6	63158.3	[50000]	µg/L	08:39:53
2	Fe 238.204 Radial†	1432.1	1404.3	[20000]	µg/L	08:40:13
2	Mg 279.077 IEC†	4664.0	4617.0	[50000]	µg/L	08:40:13
2	Na 589.592 Radial†	70586.8	69456.0	[20000]	µg/L	08:39:53
2	Sc 361.383	1972775.4	1972775.4	101.51	%	08:40:59
2	Y 371.029	1234012.3	1234012.3	100.42	%	08:40:59
3	Sc RADIAL	78064.1	78064.1	102	%	08:40:19
3	Al 396.153Radial†	72705.7	71574.7	[50000]	µg/L	08:40:19
3	Ca 317.933Radial†	64472.0	63192.6	[50000]	µg/L	08:40:19
3	Fe 238.204 Radial†	1422.1	1383.5	[20000]	µg/L	08:40:39
3	Mg 279.077 IEC†	4636.0	4553.8	[50000]	µg/L	08:40:39
3	Na 589.592 Radial†	70980.6	69304.2	[20000]	µg/L	08:40:19
3	Sc 361.383	1967490.2	1967490.2	101.24	%	08:41:06
3	Y 371.029	1230263.9	1230263.9	100.12	%	08:41:06

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1965000.7	9273.53	0.47%	101.11	%
Sc RADIAL	77694.8	323.28	0.42%	101	%
Y 371.029	1228990.8	5764.48	0.47%	100.02	%
Al 396.153Radial†	71920.3	529.59	0.74%	[50000]	µg/L
Ca 317.933Radial†	63454.5	483.66	0.76%	[50000]	µg/L
Fe 238.204 Radial†	1393.6	10.42	0.75%	[20000]	µg/L
Mg 279.077 IEC†	4584.7	31.58	0.69%	[50000]	µg/L
Na 589.592 Radial†	69635.8	449.24	0.65%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	107.3	0.00000	0.999972	
Al 396.153Radial	3	Lin Thru 0	0.0	1.439	0.00000	0.999997	
As 188.979	3	Lin Thru 0	0.0	0.4333	0.00000	0.999992	
B 249.677	3	Lin Thru 0	0.0	20.56	0.00000	0.999993	
Ba 233.527	3	Lin Thru 0	0.0	34.42	0.00000	0.999973	
Be 313.107	3	Lin Thru 0	0.0	1435	0.00000	0.999970	
Ca 317.933Radial	3	Lin Thru 0	0.0	1.270	0.00000	0.999995	
Cd 226.502	3	Lin Thru 0	0.0	33.97	0.00000	0.999959	
Co 228.616	3	Lin Thru 0	0.0	18.12	0.00000	0.999969	
Cr 267.716	3	Lin Thru 0	0.0	43.11	0.00000	0.999967	
Cu 324.752	3	Lin Thru 0	0.0	133.0	0.00000	0.999969	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0697	0.00000	1.000000	
K 766.490 Radial	3	Lin Thru 0	0.0	1.506	0.00000	0.999983	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0918	0.00000	0.999994	
Mn 257.610	3	Lin Thru 0	0.0	270.7	0.00000	0.999997	
Mo 202.031	3	Lin Thru 0	0.0	7.962	0.00000	0.999990	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.482	0.00000	1.000000	

Ni 231.604	3	Lin Thru 0	0.0	15.87	0.00000	0.999959
P 214.914	3	Lin Thru 0	0.0	0.4177	0.00000	0.999961
Pb 220.353	3	Lin Thru 0	0.0	3.429	0.00000	0.999937
S 181.975 Axial	3	Lin Thru 0	0.0	0.1744	0.00000	0.999987
Sb 206.836	3	Lin Thru 0	0.0	0.9034	0.00000	0.999891
Se 196.026	3	Lin Thru 0	0.0	0.6330	0.00000	0.999997
SiO2	3	Lin Thru 0	0.0	4.738	0.00000	0.999945
Si 251.611	3	Lin Thru 0	0.0	11.92	0.00000	0.999938
Sn 189.927	3	Lin Thru 0	0.0	1.713	0.00000	0.999956
Sr 421.552	3	Lin Thru 0	0.0	157.4	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	401.0	0.00000	0.999972
Tl 190.801	3	Lin Thru 0	0.0	0.5805	0.00000	0.999951
U 409.014	3	Lin Thru 0	0.0	10.48	0.00000	0.999989
V 292.402	3	Lin Thru 0	0.0	80.42	0.00000	0.999964
Zn 213.857	3	Lin Thru 0	0.0	34.30	0.00000	0.999965

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 1/27/2010 08:41:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	79051.4	79051.4	103	%			08:41:49
1	Al 396.153Radial†	7444.6	7262.4	5034.9	µg/L	5034.9	ppb	08:41:49
1	Ca 317.933Radial†	6641.4	6202.2	4883.8	µg/L	4883.8	ppb	08:42:09
1	Fe 238.204 Radial†	377.6	351.0	5050.3	µg/L	5050.3	ppb	08:42:09
1	K 766.490 Radial†	4093.6	3566.0	2367.2	µg/L	2367.2	ppb	08:41:49
1	Mg 279.077 IEC†	496.1	473.8	5168.0	µg/L	5168.0	ppb	08:42:09
1	Na 589.592 Radial†	9206.4	8401.6	2412.6	µg/L	2412.6	ppb	08:41:49
1	Sr 421.552†	84707.2	81758.1	519.48	µg/L	519.48	ppb	08:41:49
1	Sc 361.383	1963098.9	1963098.9	101.01	%			08:43:12
1	Y 371.029	1236485.8	1236485.8	100.63	%			08:43:12
1	Ag 328.068†	28098.4	27871.5	263.54	µg/L	263.54	ppb	08:43:18
1	As 188.979†	219.2	216.4	498.43	µg/L	498.43	ppb	08:43:39
1	B 249.677†	10890.0	10665.5	517.04	µg/L	517.04	ppb	08:43:18
1	Ba 233.527†	17704.8	17541.6	510.57	µg/L	510.57	ppb	08:43:18
1	Be 313.107†	386773.1	379051.4	263.90	µg/L	263.90	ppb	08:43:12
1	Cd 226.502†	17197.2	17160.0	505.08	µg/L	505.08	ppb	08:43:18
1	Co 228.616†	9363.5	9314.5	513.55	µg/L	513.55	ppb	08:43:18
1	Cr 267.716†	21561.6	21428.0	497.34	µg/L	497.34	ppb	08:43:18
1	Cu 324.752†	72462.3	68066.7	512.48	µg/L	512.48	ppb	08:43:18
1	Mn 257.610†	138725.5	137522.5	508.50	µg/L	508.50	ppb	08:43:18
1	Mo 202.031†	4469.3	4407.3	553.75	µg/L	553.75	ppb	08:43:39
1	Ni 231.604†	8487.3	8066.7	507.70	µg/L	507.70	ppb	08:43:18
1	P 214.914†	1319.3	1103.6	2594.0	µg/L	2594.0	ppb	08:43:39
1	Pb 220.353†	1861.8	1787.2	521.49	µg/L	521.49	ppb	08:43:39
1	S 181.975 Axial†	491.2	460.7	2641.0	µg/L	2641.0	ppb	08:43:39
1	Sb 206.836†	512.5	485.0	539.92	µg/L	539.92	ppb	08:43:39
1	Se 196.026†	1738.4	1708.5	2717.6	µg/L	2717.6	ppb	08:43:39
1	SiO2†	53334.3	50520.2	10663	µg/L	10663	ppb	08:43:18
1	Si 251.611†	60130.3	59222.2	4967.4	µg/L	4967.4	ppb	08:43:18
1	Sn 189.927†	1015.7	982.1	575.76	µg/L	575.76	ppb	08:43:39
1	Ti 334.940†	203934.3	201113.6	501.24	µg/L	501.24	ppb	08:43:12
1	Tl 190.801†	296.2	316.3	549.24	µg/L	549.24	ppb	08:43:39
1	U 409.014†	5079.0	5261.0	501.05	µg/L	501.05	ppb	08:43:18
1	V 292.402†	42002.9	41703.4	524.78	µg/L	524.78	ppb	08:43:18
1	Zn 213.857†	18676.7	17817.9	515.85	µg/L	515.85	ppb	08:43:18
2	Sc RADIAL	79195.8	79195.8	103	%			08:42:15
2	Al 396.153Radial†	7477.6	7281.2	5048.0	µg/L	5048.0	ppb	08:42:15
2	Ca 317.933Radial†	6639.0	6188.2	4872.7	µg/L	4872.7	ppb	08:42:35
2	Fe 238.204 Radial†	370.7	343.7	4945.8	µg/L	4945.8	ppb	08:42:35
2	K 766.490 Radial†	4078.1	3543.7	2352.5	µg/L	2352.5	ppb	08:42:15
2	Mg 279.077 IEC†	494.7	471.6	5143.5	µg/L	5143.5	ppb	08:42:35
2	Na 589.592 Radial†	9245.2	8422.9	2418.7	µg/L	2418.7	ppb	08:42:15
2	Sr 421.552†	85195.7	82081.8	521.54	µg/L	521.54	ppb	08:42:15
2	Sc 361.383	1956579.9	1956579.9	100.68	%			08:43:45
2	Y 371.029	1234224.7	1234224.7	100.44	%			08:43:45
2	Ag 328.068†	28487.9	28351.0	268.07	µg/L	268.07	ppb	08:43:51
2	As 188.979†	221.9	219.9	506.35	µg/L	506.35	ppb	08:44:11
2	B 249.677†	11020.1	10830.6	525.14	µg/L	525.14	ppb	08:43:51
2	Ba 233.527†	18021.5	17914.5	521.43	µg/L	521.43	ppb	08:43:51
2	Be 313.107†	390557.4	384085.9	267.40	µg/L	267.40	ppb	08:43:45
2	Cd 226.502†	17456.0	17473.8	514.34	µg/L	514.34	ppb	08:43:51
2	Co 228.616†	9521.2	9502.1	523.89	µg/L	523.89	ppb	08:43:51
2	Cr 267.716†	21872.5	21807.9	506.15	µg/L	506.15	ppb	08:43:51
2	Cu 324.752†	73520.6	69356.9	522.17	µg/L	522.17	ppb	08:43:51
2	Mn 257.610†	140818.6	140059.1	517.86	µg/L	517.86	ppb	08:43:51
2	Mo 202.031†	4447.6	4400.4	552.89	µg/L	552.89	ppb	08:44:11
2	Ni 231.604†	8622.7	8229.2	517.93	µg/L	517.93	ppb	08:43:51
2	P 214.914†	1310.4	1099.1	2582.2	µg/L	2582.2	ppb	08:44:11
2	Pb 220.353†	1868.1	1799.6	525.07	µg/L	525.07	ppb	08:44:11

2	S 181.975 Axial†	484.1	455.3	2610.1	µg/L	2610.1 ppb	08:44:11
2	Sb 206.836†	504.0	478.2	532.29	µg/L	532.29 ppb	08:44:11
2	Se 196.026†	1729.7	1705.6	2712.6	µg/L	2712.6 ppb	08:44:11
2	SiO2†	54087.7	51444.4	10859	µg/L	10859 ppb	08:43:51
2	Si 251.611†	61010.9	60295.2	5057.4	µg/L	5057.4 ppb	08:43:51
2	Sn 189.927†	1013.3	983.1	576.34	µg/L	576.34 ppb	08:44:11
2	Ti 334.940†	205645.6	203486.0	507.16	µg/L	507.16 ppb	08:43:45
2	Tl 190.801†	297.8	318.9	553.76	µg/L	553.76 ppb	08:44:11
2	U 409.014†	5088.0	5286.7	503.52	µg/L	503.52 ppb	08:43:51
2	V 292.402†	42655.2	42489.9	534.57	µg/L	534.57 ppb	08:43:51
2	Zn 213.857†	18999.1	18199.7	526.93	µg/L	526.93 ppb	08:43:51
3	Sc RADIAL	78786.2	78786.2	103	%		08:42:41
3	Al 396.153Radial†	7485.5	7326.6	5081.0	µg/L	5081.0 ppb	08:42:41
3	Ca 317.933Radial†	6653.3	6235.6	4910.0	µg/L	4910.0 ppb	08:43:01
3	Fe 238.204 Radial†	375.7	350.5	5042.0	µg/L	5042.0 ppb	08:43:01
3	K 766.490 Radial†	4187.3	3670.8	2436.8	µg/L	2436.8 ppb	08:42:41
3	Mg 279.077 IEC†	496.5	475.8	5188.2	µg/L	5188.2 ppb	08:43:01
3	Na 589.592 Radial†	9263.9	8487.7	2437.4	µg/L	2437.4 ppb	08:42:41
3	Sr 421.552†	85234.0	82548.8	524.51	µg/L	524.51 ppb	08:42:41
3	Sc 361.383	1945853.7	1945853.7	100.13	%		08:44:18
3	Y 371.029	1226795.5	1226795.5	99.837	%		08:44:18
3	Ag 328.068†	27503.9	27524.2	260.14	µg/L	260.14 ppb	08:44:24
3	As 188.979†	195.2	194.4	447.78	µg/L	447.78 ppb	08:44:44
3	B 249.677†	10576.6	10448.0	506.41	µg/L	506.41 ppb	08:44:24
3	Ba 233.527†	16984.7	16977.8	494.15	µg/L	494.15 ppb	08:44:24
3	Be 313.107†	374101.0	369788.6	257.45	µg/L	257.45 ppb	08:44:18
3	Cd 226.502†	16375.3	16490.1	485.34	µg/L	485.34 ppb	08:44:24
3	Co 228.616†	8856.5	8890.3	490.10	µg/L	490.10 ppb	08:44:24
3	Cr 267.716†	20047.2	20104.6	466.63	µg/L	466.63 ppb	08:44:24
3	Cu 324.752†	69086.7	65331.1	491.91	µg/L	491.91 ppb	08:44:24
3	Mn 257.610†	131380.4	131403.8	485.90	µg/L	485.90 ppb	08:44:24
3	Mo 202.031†	3861.6	3839.5	482.44	µg/L	482.44 ppb	08:44:44
3	Ni 231.604†	8106.3	7760.6	488.44	µg/L	488.44 ppb	08:44:24
3	P 214.914†	1192.3	988.3	2319.1	µg/L	2319.1 ppb	08:44:44
3	Pb 220.353†	1660.9	1602.9	467.59	µg/L	467.59 ppb	08:44:44
3	S 181.975 Axial†	443.1	417.0	2390.3	µg/L	2390.3 ppb	08:44:44
3	Sb 206.836†	453.8	430.9	479.20	µg/L	479.20 ppb	08:44:44
3	Se 196.026†	1574.0	1559.6	2482.3	µg/L	2482.3 ppb	08:44:44
3	SiO2†	51604.1	49260.1	10397	µg/L	10397 ppb	08:44:24
3	Si 251.611†	58129.1	57751.1	4844.0	µg/L	4844.0 ppb	08:44:24
3	Sn 189.927†	873.4	848.9	498.02	µg/L	498.02 ppb	08:44:44
3	Ti 334.940†	196455.0	195433.0	487.07	µg/L	487.07 ppb	08:44:18
3	Tl 190.801†	269.3	292.0	507.24	µg/L	507.24 ppb	08:44:44
3	U 409.014†	4691.2	4918.2	468.34	µg/L	468.34 ppb	08:44:24
3	V 292.402†	39656.9	39728.9	499.57	µg/L	499.57 ppb	08:44:24
3	Zn 213.857†	17789.3	17095.5	494.91	µg/L	494.91 ppb	08:44:24

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1955177.5	100.61	%	0.448				0.45%
Sc RADIAL	79011.2	103	%	0.3				0.26%
Y 371.029	1232502.0	100.30	%	0.413				0.41%
Ag 328.068†	27915.6	263.92	µg/L	3.977	263.92	ppb	3.977	1.51%
QC value within limits for Ag 328.068 Recovery = 105.57%								
Al 396.153Radial†	7290.1	5054.6	µg/L	23.74	5054.6	ppb	23.74	0.47%
QC value within limits for Al 396.153Radial Recovery = 101.09%								
As 188.979†	210.3	484.19	µg/L	31.773	484.19	ppb	31.773	6.56%
QC value within limits for As 188.979 Recovery = 96.84%								
B 249.677†	10648.1	516.20	µg/L	9.391	516.20	ppb	9.391	1.82%
QC value within limits for B 249.677 Recovery = 103.24%								
Ba 233.527†	17478.0	508.72	µg/L	13.734	508.72	ppb	13.734	2.70%
QC value within limits for Ba 233.527 Recovery = 101.74%								
Be 313.107†	377642.0	262.92	µg/L	5.049	262.92	ppb	5.049	1.92%
QC value within limits for Be 313.107 Recovery = 105.17%								
Ca 317.933Radial†	6208.7	4888.8	µg/L	19.18	4888.8	ppb	19.18	0.39%
QC value within limits for Ca 317.933Radial Recovery = 97.78%								
Cd 226.502†	17041.3	501.58	µg/L	14.811	501.58	ppb	14.811	2.95%
QC value within limits for Cd 226.502 Recovery = 100.32%								
Co 228.616†	9235.6	509.18	µg/L	17.313	509.18	ppb	17.313	3.40%

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   QC value within limits for Co 228.616  Recovery = 101.84%
Cr 267.716†          21113.5      490.04 µg/L        20.750      490.04 ppb        20.750   4.23%
   QC value within limits for Cr 267.716  Recovery = 98.01%
Cu 324.752†          67584.9      508.86 µg/L        15.451      508.86 ppb        15.451   3.04%
   QC value within limits for Cu 324.752  Recovery = 101.77%
Fe 238.204 Radial†     348.4      5012.7 µg/L         58.08      5012.7 ppb         58.08   1.16%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.25%
K 766.490 Radial†     3593.5      2385.5 µg/L         45.03      2385.5 ppb         45.03   1.89%
   QC value within limits for K 766.490 Radial  Recovery = 95.42%
Mg 279.077 IEC†        473.7      5166.6 µg/L         22.38      5166.6 ppb         22.38   0.43%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.33%
Mn 257.610†         136328.5      504.09 µg/L        16.433      504.09 ppb        16.433   3.26%
   QC value within limits for Mn 257.610  Recovery = 100.82%
Mo 202.031†          4215.7      529.69 µg/L        40.922      529.69 ppb        40.922   7.73%
   QC value within limits for Mo 202.031  Recovery = 105.94%
Na 589.592 Radial†   8437.4      2422.9 µg/L         12.88      2422.9 ppb         12.88   0.53%
   QC value within limits for Na 589.592 Radial  Recovery = 96.92%
Ni 231.604†          8018.8      504.69 µg/L        14.970      504.69 ppb        14.970   2.97%
   QC value within limits for Ni 231.604  Recovery = 100.94%
P 214.914†           1063.7      2498.4 µg/L        155.42      2498.4 ppb        155.42   6.22%
   QC value within limits for P 214.914  Recovery = 99.94%
Pb 220.353†          1729.9      504.72 µg/L        32.204      504.72 ppb        32.204   6.38%
   QC value within limits for Pb 220.353  Recovery = 100.94%
S 181.975 Axial†      444.3      2547.1 µg/L        136.70      2547.1 ppb        136.70   5.37%
   QC value within limits for S 181.975 Axial  Recovery = 101.89%
Sb 206.836†           464.7      517.14 µg/L        33.070      517.14 ppb        33.070   6.39%
   QC value within limits for Sb 206.836  Recovery = 103.43%
Se 196.026†          1657.9      2637.5 µg/L        134.43      2637.5 ppb        134.43   5.10%
   QC value within limits for Se 196.026  Recovery = 105.50%
SiO2†               50408.2       10640 µg/L         231.4       10640 ppb         231.4   2.18%
   QC value within limits for SiO2  Recovery = 99.48%
Si 251.611†         59089.5      4956.2 µg/L        107.13      4956.2 ppb        107.13   2.16%
   QC value within limits for Si 251.611  Recovery = 99.12%
Sn 189.927†           938.0      550.04 µg/L        45.048      550.04 ppb        45.048   8.19%
   QC value greater than the upper limit for Sn 189.927  Recovery = 110.01%
Sr 421.552†         82129.6      521.84 µg/L         2.526      521.84 ppb         2.526   0.48%
   QC value within limits for Sr 421.552  Recovery = 104.37%
Ti 334.940†        200010.9      498.49 µg/L        10.322      498.49 ppb        10.322   2.07%
   QC value within limits for Ti 334.940  Recovery = 99.70%
Tl 190.801†           309.1      536.75 µg/L        25.655      536.75 ppb        25.655   4.78%
   QC value within limits for Tl 190.801  Recovery = 107.35%
U 409.014†           5155.3      490.97 µg/L        19.636      490.97 ppb        19.636   4.00%
   QC value within limits for U 409.014  Recovery = 98.19%
V 292.402†          41307.4      519.64 µg/L        18.056      519.64 ppb        18.056   3.47%
   QC value within limits for V 292.402  Recovery = 103.93%
Zn 213.857†         17704.4      512.56 µg/L        16.261      512.56 ppb        16.261   3.17%
   QC value within limits for Zn 213.857  Recovery = 102.51%
QC Failed.  Continue with analysis.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/27/2010 08:44:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76272.5	76272.5	99.3	%			08:45:27
1	Al 396.153Radial†	-13.1	14.8	10.297	µg/L	10.297	ppb	08:45:27
1	Ca 317.933Radial†	247.1	-2.8	-2.2023	µg/L	-2.2023	ppb	08:45:48
1	Fe 238.204 Radial†	17.7	2.0	28.631	µg/L	28.631	ppb	08:45:48
1	K 766.490 Radial†	412.5	3.5	2.2982	µg/L	2.2982	ppb	08:45:27
1	Mg 279.077 IEC†	9.1	0.9	9.3798	µg/L	9.3798	ppb	08:45:48
1	Na 589.592 Radial†	513.4	-27.9	-8.0070	µg/L	-8.0070	ppb	08:45:27
1	Sr 421.552†	549.3	-4.4	-0.0282	µg/L	-0.0282	ppb	08:45:27
1	Sc 361.383	1932739.5	1932739.5	99.452	%			08:46:49
1	Y 371.029	1222269.0	1222269.0	99.469	%			08:46:49
1	Ag 328.068†	15.1	70.3	0.6630	µg/L	0.6630	ppb	08:46:55
1	As 188.979†	-4.4	-5.0	-11.501	µg/L	-11.501	ppb	08:47:16
1	B 249.677†	149.7	35.3	1.7032	µg/L	1.7032	ppb	08:47:16
1	Ba 233.527†	-16.8	-2.3	-0.0663	µg/L	-0.0663	ppb	08:47:16
1	Be 313.107†	3913.2	95.4	0.0664	µg/L	0.0664	ppb	08:46:55
1	Cd 226.502†	-133.6	1.1	0.0293	µg/L	0.0293	ppb	08:47:16
1	Co 228.616†	-46.6	-1.9	-0.1045	µg/L	-0.1045	ppb	08:47:16
1	Cr 267.716†	-83.7	-1.3	-0.0307	µg/L	-0.0307	ppb	08:47:16
1	Cu 324.752†	3718.2	70.5	0.5342	µg/L	0.5342	ppb	08:46:55
1	Mn 257.610†	-208.7	-20.3	-0.0717	µg/L	-0.0717	ppb	08:47:16
1	Mo 202.031†	13.8	-3.3	-0.4165	µg/L	-0.4165	ppb	08:47:16
1	Ni 231.604†	340.7	7.1	0.4493	µg/L	0.4493	ppb	08:47:16
1	P 214.914†	202.8	1.5	3.4199	µg/L	3.4199	ppb	08:47:16
1	Pb 220.353†	53.2	-2.4	-0.7088	µg/L	-0.7088	ppb	08:47:16
1	S 181.975 Axial†	22.0	-3.3	-19.173	µg/L	-19.173	ppb	08:47:16
1	Sb 206.836†	26.0	3.8	4.1744	µg/L	4.1744	ppb	08:47:16
1	Se 196.026†	6.3	-6.1	-9.4570	µg/L	-9.4570	ppb	08:47:16
1	SiO2†	2238.0	-28.4	-5.9985	µg/L	-5.9985	ppb	08:46:55
1	Si 251.611†	276.6	-26.4	-2.2168	µg/L	-2.2168	ppb	08:47:16
1	Sn 189.927†	21.6	-1.7	-0.9635	µg/L	-0.9635	ppb	08:47:16
1	Ti 334.940†	831.0	61.9	0.1536	µg/L	0.1536	ppb	08:46:55
1	Tl 190.801†	-22.6	0.3	0.5619	µg/L	0.5619	ppb	08:47:16
1	U 409.014†	-266.3	-34.8	-3.3206	µg/L	-3.3206	ppb	08:46:55
1	V 292.402†	-45.3	76.6	0.9468	µg/L	0.9468	ppb	08:46:55
1	Zn 213.857†	653.0	-14.7	-0.4346	µg/L	-0.4346	ppb	08:47:16
2	Sc RADIAL	76116.0	76116.0	99.1	%			08:45:53
2	Al 396.153Radial†	-56.7	-29.3	-20.333	µg/L	-20.333	ppb	08:45:53
2	Ca 317.933Radial†	256.1	6.8	5.3936	µg/L	5.3936	ppb	08:46:13
2	Fe 238.204 Radial†	17.2	1.5	21.461	µg/L	21.461	ppb	08:46:13
2	K 766.490 Radial†	414.5	6.3	4.2139	µg/L	4.2139	ppb	08:45:53
2	Mg 279.077 IEC†	9.1	0.9	9.2493	µg/L	9.2493	ppb	08:46:13
2	Na 589.592 Radial†	502.7	-37.5	-10.780	µg/L	-10.780	ppb	08:45:53
2	Sr 421.552†	571.9	19.5	0.1240	µg/L	0.1240	ppb	08:45:53
2	Sc 361.383	1945577.1	1945577.1	100.11	%			08:47:22
2	Y 371.029	1230330.5	1230330.5	100.12	%			08:47:22
2	Ag 328.068†	-77.9	-22.8	-0.2031	µg/L	-0.2031	ppb	08:47:27
2	As 188.979†	-2.9	-3.4	-7.9485	µg/L	-7.9485	ppb	08:47:48
2	B 249.677†	149.1	33.7	1.6283	µg/L	1.6283	ppb	08:47:48
2	Ba 233.527†	-18.7	-4.1	-0.1174	µg/L	-0.1174	ppb	08:47:48
2	Be 313.107†	3940.2	96.3	0.0671	µg/L	0.0671	ppb	08:47:27
2	Cd 226.502†	-134.0	1.7	0.0466	µg/L	0.0466	ppb	08:47:48
2	Co 228.616†	-43.2	1.8	0.0991	µg/L	0.0991	ppb	08:47:48
2	Cr 267.716†	-78.8	4.1	0.0961	µg/L	0.0961	ppb	08:47:48
2	Cu 324.752†	3700.6	28.2	0.2151	µg/L	0.2151	ppb	08:47:27
2	Mn 257.610†	-198.9	-9.2	-0.0315	µg/L	-0.0315	ppb	08:47:48
2	Mo 202.031†	11.9	-5.3	-0.6609	µg/L	-0.6609	ppb	08:47:48
2	Ni 231.604†	341.6	5.8	0.3658	µg/L	0.3658	ppb	08:47:48
2	P 214.914†	212.1	9.3	22.261	µg/L	22.261	ppb	08:47:48
2	Pb 220.353†	50.9	-5.0	-1.4730	µg/L	-1.4730	ppb	08:47:48

2	S 181.975 Axial†	21.9	-3.6	-20.597 µg/L	-20.597 ppb	08:47:48
2	Sb 206.836†	31.3	8.9	9.8324 µg/L	9.8324 ppb	08:47:48
2	Se 196.026†	8.9	-3.6	-5.5505 µg/L	-5.5505 ppb	08:47:48
2	SiO2†	2241.4	-39.9	-8.4261 µg/L	-8.4261 ppb	08:47:27
2	Si 251.611†	290.3	-14.5	-1.2161 µg/L	-1.2161 ppb	08:47:48
2	Sn 189.927†	20.4	-3.0	-1.7600 µg/L	-1.7600 ppb	08:47:48
2	Ti 334.940†	850.9	76.3	0.1897 µg/L	0.1897 ppb	08:47:27
2	Tl 190.801†	-16.7	6.4	10.960 µg/L	10.960 ppb	08:47:48
2	U 409.014†	-272.0	-38.8	-3.7016 µg/L	-3.7016 ppb	08:47:27
2	V 292.402†	-28.8	93.3	1.1529 µg/L	1.1529 ppb	08:47:27
2	Zn 213.857†	656.7	-15.3	-0.4505 µg/L	-0.4505 ppb	08:47:48
3	Sc RADIAL	76125.8	76125.8	99.1 %		08:46:19
3	Al 396.153Radial†	-20.8	7.0	4.8595 µg/L	4.8595 ppb	08:46:19
3	Ca 317.933Radial†	246.8	-2.6	-2.0738 µg/L	-2.0738 ppb	08:46:39
3	Fe 238.204 Radial†	16.8	1.1	15.977 µg/L	15.977 ppb	08:46:39
3	K 766.490 Radial†	398.3	-10.0	-6.6694 µg/L	-6.6694 ppb	08:46:19
3	Mg 279.077 IEC†	9.2	1.0	10.679 µg/L	10.679 ppb	08:46:39
3	Na 589.592 Radial†	477.9	-62.7	-18.004 µg/L	-18.004 ppb	08:46:19
3	Sr 421.552†	577.3	24.9	0.1581 µg/L	0.1581 ppb	08:46:19
3	Sc 361.383	1954667.6	1954667.6	100.58 %		08:47:54
3	Y 371.029	1236383.9	1236383.9	100.62 %		08:47:54
3	Ag 328.068†	-7.2	48.0	0.4462 µg/L	0.4462 ppb	08:47:59
3	As 188.979†	-1.5	-2.0	-4.6372 µg/L	-4.6372 ppb	08:48:20
3	B 249.677†	136.6	20.7	0.9963 µg/L	0.9963 ppb	08:48:20
3	Ba 233.527†	-23.5	-8.9	-0.2585 µg/L	-0.2585 ppb	08:48:20
3	Be 313.107†	3924.8	62.7	0.0436 µg/L	0.0436 ppb	08:47:59
3	Cd 226.502†	-131.9	4.4	0.1263 µg/L	0.1263 ppb	08:48:20
3	Co 228.616†	-40.5	4.8	0.2627 µg/L	0.2627 ppb	08:48:20
3	Cr 267.716†	-86.8	-3.5	-0.0824 µg/L	-0.0824 ppb	08:48:20
3	Cu 324.752†	3699.9	10.4	0.0802 µg/L	0.0802 ppb	08:47:59
3	Mn 257.610†	-206.1	-15.4	-0.0552 µg/L	-0.0552 ppb	08:48:20
3	Mo 202.031†	20.2	2.9	0.3634 µg/L	0.3634 ppb	08:48:20
3	Ni 231.604†	333.6	-3.8	-0.2387 µg/L	-0.2387 ppb	08:48:20
3	P 214.914†	202.7	-0.9	-2.1992 µg/L	-2.1992 ppb	08:48:20
3	Pb 220.353†	58.2	2.0	0.5767 µg/L	0.5767 ppb	08:48:20
3	S 181.975 Axial†	23.0	-2.6	-15.141 µg/L	-15.141 ppb	08:48:20
3	Sb 206.836†	25.2	2.7	2.9740 µg/L	2.9740 ppb	08:48:20
3	Se 196.026†	8.9	-3.6	-5.6183 µg/L	-5.6183 ppb	08:48:20
3	SiO2†	2234.6	-57.1	-12.049 µg/L	-12.049 ppb	08:47:59
3	Si 251.611†	300.6	-5.7	-0.4770 µg/L	-0.4770 ppb	08:48:20
3	Sn 189.927†	23.6	0.0	0.0229 µg/L	0.0229 ppb	08:48:20
3	Ti 334.940†	862.6	83.9	0.2085 µg/L	0.2085 ppb	08:47:59
3	Tl 190.801†	-21.1	2.1	3.5533 µg/L	3.5533 ppb	08:48:20
3	U 409.014†	-241.6	-7.3	-0.6965 µg/L	-0.6965 ppb	08:47:59
3	V 292.402†	-144.6	-21.6	-0.2661 µg/L	-0.2661 ppb	08:47:59
3	Zn 213.857†	653.4	-21.6	-0.6314 µg/L	-0.6314 ppb	08:48:20

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1944328.1	100.05	%	0.567				0.57%
Sc RADIAL	76171.4	99.2	%	0.11				0.12%
Y 371.029	1229661.2	100.07	%	0.576				0.58%
Ag 328.068†	31.8	0.3020	µg/L	0.45069	0.3020	ppb	0.45069	149.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.5	-1.7253	µg/L	16.34232	-1.7253	ppb	16.34232	947.24%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.5	-8.0290	µg/L	3.43269	-8.0290	ppb	3.43269	42.75%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	29.9	1.4426	µg/L	0.38827	1.4426	ppb	0.38827	26.91%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-5.1	-0.1474	µg/L	0.09952	-0.1474	ppb	0.09952	67.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	84.8	0.0590	µg/L	0.01335	0.0590	ppb	0.01335	22.61%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.5	0.3725	µg/L	4.34886	0.3725	ppb	4.34886	>999.9%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.4	0.0674	µg/L	0.05172	0.0674	ppb	0.05172	76.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.6	0.0858	µg/L	0.18395	0.0858	ppb	0.18395	214.45%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -0.3     -0.0057 µg/L      0.09184     -0.0057 ppb       0.09184 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              36.4      0.2765 µg/L      0.23316      0.2765 ppb       0.23316  84.32%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.5      22.023 µg/L       6.3456      22.023 ppb        6.3456  28.81%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -0.1     -0.0524 µg/L      5.80999     -0.0524 ppb       5.80999 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.9      9.7694 µg/L      0.79048      9.7694 ppb       0.79048   8.09%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -15.0     -0.0528 µg/L      0.02022     -0.0528 ppb       0.02022  38.28%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -1.9     -0.2380 µg/L      0.53496     -0.2380 ppb       0.53496 224.76%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -42.7     -12.264 µg/L       5.1608     -12.264 ppb        5.1608  42.08%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               3.0      0.1921 µg/L      0.37548      0.1921 ppb       0.37548 195.43%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                3.3      7.8274 µg/L     12.81216      7.8274 ppb      12.81216 163.68%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -1.8     -0.5350 µg/L      1.03587     -0.5350 ppb       1.03587 193.61%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -3.2     -18.304 µg/L       2.8301     -18.304 ppb        2.8301  15.46%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               5.1      5.6603 µg/L      3.66265      5.6603 ppb       3.66265  64.71%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -4.4     -6.8753 µg/L      2.23608     -6.8753 ppb       2.23608  32.52%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -41.8     -8.8245 µg/L      3.04473     -8.8245 ppb       3.04473  34.50%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†             -15.5     -1.3033 µg/L      0.87315     -1.3033 ppb       0.87315  66.99%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.5     -0.9002 µg/L      0.89313     -0.9002 ppb       0.89313  99.22%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              13.3      0.0846 µg/L      0.09916      0.0846 ppb       0.09916 117.19%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              74.1      0.1839 µg/L      0.02788      0.1839 ppb       0.02788  15.16%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.9      5.0249 µg/L      5.35276      5.0249 ppb       5.35276 106.52%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -26.9     -2.5729 µg/L      1.63615     -2.5729 ppb       1.63615  63.59%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               49.4      0.6112 µg/L      0.76676      0.6112 ppb       0.76676 125.45%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -17.2     -0.5055 µg/L      0.10937     -0.5055 ppb       0.10937  21.64%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 1/27/2010 08:48:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75969.0	75969.0	98.9	%			08:49:02
1	Al 396.153Radial†	284.1	315.2	218.83	µg/L	218.83	ppb	08:49:02
1	Ca 317.933Radial†	508.4	262.4	206.61	µg/L	206.61	ppb	08:49:23
1	Fe 238.204 Radial†	24.8	9.2	131.62	µg/L	131.62	ppb	08:49:23
1	K 766.490 Radial†	695.7	291.5	193.53	µg/L	193.53	ppb	08:49:02
1	Mg 279.077 IEC†	40.9	33.0	359.75	µg/L	359.75	ppb	08:49:23
1	Na 589.592 Radial†	1539.5	1011.8	290.57	µg/L	290.57	ppb	08:49:02
1	Sr 421.552†	1385.7	843.5	5.3594	µg/L	5.3594	ppb	08:49:02
1	Sc 361.383	1920691.4	1920691.4	98.832	%			08:50:25
1	Y 371.029	1215717.6	1215717.6	98.935	%			08:50:25
1	Ag 328.068†	523.2	584.5	5.4898	µg/L	5.4898	ppb	08:50:30
1	As 188.979†	14.8	14.4	33.192	µg/L	33.192	ppb	08:50:51
1	B 249.677†	1201.0	1100.0	53.454	µg/L	53.454	ppb	08:50:30
1	Ba 233.527†	169.0	185.5	5.3985	µg/L	5.3985	ppb	08:50:51
1	Be 313.107†	11380.8	7675.9	5.3458	µg/L	5.3458	ppb	08:50:30
1	Cd 226.502†	45.3	181.2	5.3266	µg/L	5.3266	ppb	08:50:51
1	Co 228.616†	53.2	98.9	5.4552	µg/L	5.4552	ppb	08:50:51
1	Cr 267.716†	144.2	228.7	5.3079	µg/L	5.3079	ppb	08:50:30
1	Cu 324.752†	5183.3	1576.4	11.871	µg/L	11.871	ppb	08:50:30
1	Mn 257.610†	2726.8	2948.5	10.896	µg/L	10.896	ppb	08:50:30
1	Mo 202.031†	94.6	78.5	9.8709	µg/L	9.8709	ppb	08:50:51
1	Ni 231.604†	426.4	96.0	6.0428	µg/L	6.0428	ppb	08:50:51
1	P 214.914†	273.6	74.3	176.85	µg/L	176.85	ppb	08:50:51
1	Pb 220.353†	88.5	33.6	9.7587	µg/L	9.7587	ppb	08:50:51
1	S 181.975 Axial†	40.3	15.3	87.637	µg/L	87.637	ppb	08:50:51
1	Sb 206.836†	30.7	8.6	9.6382	µg/L	9.6382	ppb	08:50:51
1	Se 196.026†	31.0	18.9	30.314	µg/L	30.314	ppb	08:50:51
1	SiO2†	3342.1	1102.9	232.79	µg/L	232.79	ppb	08:50:30
1	Si 251.611†	1546.9	1260.7	105.74	µg/L	105.74	ppb	08:50:51
1	Sn 189.927†	44.5	21.6	12.728	µg/L	12.728	ppb	08:50:51
1	Ti 334.940†	2926.6	2187.5	5.4304	µg/L	5.4304	ppb	08:50:30
1	Tl 190.801†	-12.4	10.5	18.254	µg/L	18.254	ppb	08:50:51
1	U 409.014†	359.3	596.6	56.898	µg/L	56.898	ppb	08:50:30
1	V 292.402†	277.4	402.8	5.1635	µg/L	5.1635	ppb	08:50:30
1	Zn 213.857†	1016.3	357.0	10.334	µg/L	10.334	ppb	08:50:51
2	Sc RADIAL	76669.6	76669.6	99.8	%			08:49:28
2	Al 396.153Radial†	270.5	299.0	207.53	µg/L	207.53	ppb	08:49:28
2	Ca 317.933Radial†	506.1	255.4	201.14	µg/L	201.14	ppb	08:49:48
2	Fe 238.204 Radial†	25.1	9.3	132.93	µg/L	132.93	ppb	08:49:48
2	K 766.490 Radial†	726.2	315.6	209.53	µg/L	209.53	ppb	08:49:28
2	Mg 279.077 IEC†	41.3	33.1	360.96	µg/L	360.96	ppb	08:49:48
2	Na 589.592 Radial†	1567.3	1025.4	294.47	µg/L	294.47	ppb	08:49:28
2	Sr 421.552†	1408.3	853.3	5.4220	µg/L	5.4220	ppb	08:49:28
2	Sc 361.383	1942858.2	1942858.2	99.972	%			08:50:57
2	Y 371.029	1228778.5	1228778.5	99.998	%			08:50:57
2	Ag 328.068†	515.6	570.9	5.3622	µg/L	5.3622	ppb	08:51:02
2	As 188.979†	13.0	12.5	28.728	µg/L	28.728	ppb	08:51:23
2	B 249.677†	1181.2	1066.3	51.817	µg/L	51.817	ppb	08:51:02
2	Ba 233.527†	159.2	173.8	5.0578	µg/L	5.0578	ppb	08:51:23
2	Be 313.107†	11317.2	7480.9	5.2101	µg/L	5.2101	ppb	08:51:02
2	Cd 226.502†	39.2	174.7	5.1334	µg/L	5.1334	ppb	08:51:23
2	Co 228.616†	50.5	95.5	5.2692	µg/L	5.2692	ppb	08:51:23
2	Cr 267.716†	154.5	237.4	5.5086	µg/L	5.5086	ppb	08:51:02
2	Cu 324.752†	5135.5	1468.7	11.062	µg/L	11.062	ppb	08:51:02
2	Mn 257.610†	2706.3	2896.5	10.704	µg/L	10.704	ppb	08:51:02
2	Mo 202.031†	102.2	85.1	10.689	µg/L	10.689	ppb	08:51:23
2	Ni 231.604†	418.9	83.6	5.2625	µg/L	5.2625	ppb	08:51:23
2	P 214.914†	261.2	58.8	139.68	µg/L	139.68	ppb	08:51:23
2	Pb 220.353†	85.6	29.7	8.6225	µg/L	8.6225	ppb	08:51:23

2	S 181.975 Axial†	40.3	14.8	84.873 µg/L	84.873 ppb	08:51:23
2	Sb 206.836†	30.6	8.2	9.1533 µg/L	9.1533 ppb	08:51:23
2	Se 196.026†	32.4	20.0	32.030 µg/L	32.030 ppb	08:51:23
2	SiO2†	3373.7	1095.9	231.32 µg/L	231.32 ppb	08:51:02
2	Si 251.611†	1536.0	1231.9	103.33 µg/L	103.33 ppb	08:51:23
2	Sn 189.927†	42.0	18.6	10.999 µg/L	10.999 ppb	08:51:23
2	Ti 334.940†	2871.7	2098.8	5.2091 µg/L	5.2091 ppb	08:51:02
2	Tl 190.801†	-6.3	16.7	28.951 µg/L	28.951 ppb	08:51:23
2	U 409.014†	344.6	577.7	55.095 µg/L	55.095 ppb	08:51:02
2	V 292.402†	274.1	396.4	5.0880 µg/L	5.0880 ppb	08:51:02
2	Zn 213.857†	1035.3	364.2	10.551 µg/L	10.551 ppb	08:51:23
3	Sc RADIAL	76397.8	76397.8	99.5 %		08:49:54
3	Al 396.153Radial†	273.3	302.8	210.20 µg/L	210.20 ppb	08:49:54
3	Ca 317.933Radial†	513.2	264.3	208.15 µg/L	208.15 ppb	08:50:14
3	Fe 238.204 Radial†	24.9	9.2	132.00 µg/L	132.00 ppb	08:50:14
3	K 766.490 Radial†	689.9	281.7	186.99 µg/L	186.99 ppb	08:49:54
3	Mg 279.077 IEC†	41.2	33.1	361.06 µg/L	361.06 ppb	08:50:14
3	Na 589.592 Radial†	1558.3	1022.0	293.47 µg/L	293.47 ppb	08:49:54
3	Sr 421.552†	1413.6	863.8	5.4882 µg/L	5.4882 ppb	08:49:54
3	Sc 361.383	1966248.1	1966248.1	101.18 %		08:51:29
3	Y 371.029	1243520.0	1243520.0	101.20 %		08:51:29
3	Ag 328.068†	476.5	526.0	4.9415 µg/L	4.9415 ppb	08:51:35
3	As 188.979†	10.5	9.8	22.626 µg/L	22.626 ppb	08:51:55
3	B 249.677†	1143.8	1015.3	49.332 µg/L	49.332 ppb	08:51:35
3	Ba 233.527†	140.1	153.0	4.4540 µg/L	4.4540 ppb	08:51:55
3	Be 313.107†	10897.5	6931.4	4.8274 µg/L	4.8274 ppb	08:51:35
3	Cd 226.502†	29.3	164.4	4.8298 µg/L	4.8298 ppb	08:51:55
3	Co 228.616†	39.0	83.5	4.6079 µg/L	4.6079 ppb	08:51:55
3	Cr 267.716†	138.7	219.9	5.1029 µg/L	5.1029 ppb	08:51:35
3	Cu 324.752†	5083.7	1356.4	10.217 µg/L	10.217 ppb	08:51:35
3	Mn 257.610†	2554.6	2714.4	10.031 µg/L	10.031 ppb	08:51:35
3	Mo 202.031†	85.9	67.7	8.5123 µg/L	8.5123 ppb	08:51:55
3	Ni 231.604†	425.1	84.8	5.3370 µg/L	5.3370 ppb	08:51:55
3	P 214.914†	270.6	64.9	154.48 µg/L	154.48 ppb	08:51:55
3	Pb 220.353†	90.8	33.8	9.8176 µg/L	9.8176 ppb	08:51:55
3	S 181.975 Axial†	39.8	13.8	79.056 µg/L	79.056 ppb	08:51:55
3	Sb 206.836†	33.5	10.7	11.943 µg/L	11.943 ppb	08:51:55
3	Se 196.026†	24.1	11.4	18.456 µg/L	18.456 ppb	08:51:55
3	SiO2†	3335.8	1018.3	214.93 µg/L	214.93 ppb	08:51:35
3	Si 251.611†	1393.7	1073.0	89.998 µg/L	89.998 ppb	08:51:55
3	Sn 189.927†	41.3	17.4	10.259 µg/L	10.259 ppb	08:51:55
3	Ti 334.940†	2746.0	1940.4	4.8141 µg/L	4.8141 ppb	08:51:35
3	Tl 190.801†	-11.5	11.7	20.227 µg/L	20.227 ppb	08:51:55
3	U 409.014†	278.4	508.2	48.463 µg/L	48.463 ppb	08:51:35
3	V 292.402†	247.2	366.5	4.6922 µg/L	4.6922 ppb	08:51:35
3	Zn 213.857†	990.1	307.3	8.8916 µg/L	8.8916 ppb	08:51:55

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1943265.9	99.993	%	1.1722				1.17%
Sc RADIAL	76345.5	99.4	%	0.46				0.46%
Y 371.029	1229338.7	100.04	%	1.132				1.13%
Ag 328.068†	560.5	5.2645	µg/L	0.28690	5.2645	ppb	0.28690	5.45%
QC value within limits for Ag 328.068 Recovery = 105.29%								
Al 396.153Radial†	305.7	212.19	µg/L	5.906	212.19	ppb	5.906	2.78%
QC value within limits for Al 396.153Radial Recovery = 106.09%								
As 188.979†	12.2	28.182	µg/L	5.3038	28.182	ppb	5.3038	18.82%
QC value within limits for As 188.979 Recovery = 93.94%								
B 249.677†	1060.5	51.534	µg/L	2.0751	51.534	ppb	2.0751	4.03%
QC value within limits for B 249.677 Recovery = 103.07%								
Ba 233.527†	170.8	4.9701	µg/L	0.47834	4.9701	ppb	0.47834	9.62%
QC value within limits for Ba 233.527 Recovery = 99.40%								
Be 313.107†	7362.7	5.1277	µg/L	0.26883	5.1277	ppb	0.26883	5.24%
QC value within limits for Be 313.107 Recovery = 102.55%								
Ca 317.933Radial†	260.7	205.30	µg/L	3.686	205.30	ppb	3.686	1.80%
QC value within limits for Ca 317.933Radial Recovery = 102.65%								
Cd 226.502†	173.5	5.0966	µg/L	0.25045	5.0966	ppb	0.25045	4.91%
QC value within limits for Cd 226.502 Recovery = 101.93%								
Co 228.616†	92.6	5.1108	µg/L	0.44533	5.1108	ppb	0.44533	8.71%

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   QC value within limits for Co 228.616  Recovery = 102.22%
Cr 267.716†              228.7      5.3065 µg/L       0.20282      5.3065 ppb        0.20282   3.82%
   QC value within limits for Cr 267.716  Recovery = 106.13%
Cu 324.752†             1467.2      11.050 µg/L        0.8271      11.050 ppb         0.8271   7.48%
   QC value within limits for Cu 324.752  Recovery = 110.50%
Fe 238.204 Radial†         9.2      132.18 µg/L         0.674      132.18 ppb          0.674   0.51%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 132.18%
K 766.490 Radial†        296.3      196.68 µg/L        11.596      196.68 ppb         11.596   5.90%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = 131.12%
Mg 279.077 IEC†           33.1      360.59 µg/L         0.729      360.59 ppb          0.729   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 120.20%
Mn 257.610†             2853.1      10.543 µg/L        0.4543      10.543 ppb         0.4543   4.31%
   QC value within limits for Mn 257.610  Recovery = 105.43%
Mo 202.031†               77.1      9.6907 µg/L       1.09946      9.6907 ppb        1.09946  11.35%
   QC value within limits for Mo 202.031  Recovery = 96.91%
Na 589.592 Radial†      1019.7      292.83 µg/L         2.026      292.83 ppb          2.026   0.69%
   QC value within limits for Na 589.592 Radial  Recovery = 97.61%
Ni 231.604†               88.1      5.5474 µg/L       0.43065      5.5474 ppb        0.43065   7.76%
   QC value within limits for Ni 231.604  Recovery = 110.95%
P 214.914†                66.0      157.01 µg/L        18.713      157.01 ppb         18.713  11.92%
   QC value within limits for P 214.914  Recovery = 104.67%
Pb 220.353†               32.4      9.3996 µg/L       0.67368      9.3996 ppb        0.67368   7.17%
   QC value within limits for Pb 220.353  Recovery = 94.00%
S 181.975 Axial†          14.6      83.855 µg/L        4.3804      83.855 ppb         4.3804   5.22%
   QC value within limits for S 181.975 Axial  Recovery = 83.86%
Sb 206.836†                9.2      10.245 µg/L        1.4907      10.245 ppb         1.4907  14.55%
   QC value within limits for Sb 206.836  Recovery = 102.45%
Se 196.026†               16.8      26.933 µg/L        7.3916      26.933 ppb         7.3916  27.44%
   QC value within limits for Se 196.026  Recovery = 89.78%
SiO2†                   1072.4      226.34 µg/L         9.910      226.34 ppb          9.910   4.38%
   QC value within limits for SiO2  Recovery = 106.27%
Si 251.611†             1188.5      99.690 µg/L        8.4802      99.690 ppb         8.4802   8.51%
   QC value within limits for Si 251.611  Recovery = 99.69%
Sn 189.927†               19.2      11.329 µg/L        1.2674      11.329 ppb         1.2674  11.19%
   QC value within limits for Sn 189.927  Recovery = 113.29%
Sr 421.552†              853.5      5.4232 µg/L       0.06441      5.4232 ppb        0.06441   1.19%
   QC value within limits for Sr 421.552  Recovery = 108.46%
Ti 334.940†             2075.6      5.1512 µg/L       0.31221      5.1512 ppb        0.31221   6.06%
   QC value within limits for Ti 334.940  Recovery = 103.02%
Tl 190.801†               13.0      22.477 µg/L        5.6921      22.477 ppb         5.6921  25.32%
   QC value within limits for Tl 190.801  Recovery = 112.39%
U 409.014†               560.8      53.485 µg/L        4.4418      53.485 ppb         4.4418   8.30%
   QC value within limits for U 409.014  Recovery = 106.97%
V 292.402†               388.6      4.9813 µg/L       0.25313      4.9813 ppb        0.25313   5.08%
   QC value within limits for V 292.402  Recovery = 99.63%
Zn 213.857†              342.8      9.9256 µg/L       0.90197      9.9256 ppb        0.90197   9.09%
   QC value within limits for Zn 213.857  Recovery = 99.26%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 1/27/2010 08:52:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75848.6	75848.6	98.7	%			08:52:46
1	Al 396.153Radial†	743409.2	752954.5	523190	µg/L	523190	ppb	08:52:41
1	Ca 317.933Radial†	627835.4	635621.5	500500	µg/L	500500	ppb	08:52:41
1	Fe 238.204 Radial†	13383.6	13539.1	194370	µg/L	194370	ppb	08:52:46
1	K 766.490 Radial†	273.1	-135.4	-89.877	µg/L	-89.877	ppb	08:52:46
1	Mg 279.077 IEC†	45554.9	46129.8	502540	µg/L	502540	ppb	08:52:46
1	Na 589.592 Radial†	534.4	-3.7	-1.0722	µg/L	-1.0722	ppb	08:52:46
1	Sr 421.552†	1115.2	571.8	3.6330	µg/L	3.6330	ppb	08:52:46
1	Sc 361.383	1842815.0	1842815.0	94.825	%			08:53:19
1	Y 371.029	1151480.8	1151480.8	93.708	%			08:53:19
1	Ag 328.068†	-1958.6	-2010.5	-6.5603	µg/L	-6.5603	ppb	08:53:25
1	As 188.979†	-4.2	-5.0	-26.252	µg/L	-26.252	ppb	08:53:45
1	B 249.677†	2198.8	2203.6	5.7787	µg/L	5.7787	ppb	08:53:25
1	Ba 233.527†	216.2	242.5	7.0287	µg/L	7.0287	ppb	08:53:45
1	Be 313.107†	3026.4	-647.8	-0.4614	µg/L	-0.4614	ppb	08:53:25
1	Cd 226.502†	652.8	823.9	2.2875	µg/L	2.2875	ppb	08:53:45
1	Co 228.616†	6.9	52.3	2.8185	µg/L	2.8185	ppb	08:53:45
1	Cr 267.716†	-96.3	-18.8	-0.4422	µg/L	-0.4422	ppb	08:53:45
1	Cu 324.752†	649.1	-2983.7	4.5838	µg/L	4.5838	ppb	08:53:25
1	Mn 257.610†	-2413.4	-2355.6	-2.9607	µg/L	-2.9607	ppb	08:53:25
1	Mo 202.031†	-97.5	-120.0	-7.6844	µg/L	-7.6844	ppb	08:53:45
1	Ni 231.604†	299.6	-19.5	1.2960	µg/L	1.2960	ppb	08:53:45
1	P 214.914†	219.1	28.6	60.325	µg/L	60.325	ppb	08:53:45
1	Pb 220.353†	-50.2	-108.9	-10.372	µg/L	-10.372	ppb	08:53:45
1	S 181.975 Axial†	65.3	43.3	248.28	µg/L	248.28	ppb	08:53:45
1	Sb 206.836†	69.8	51.2	23.392	µg/L	23.392	ppb	08:53:45
1	Se 196.026†	-411.1	-446.0	-41.561	µg/L	-41.561	ppb	08:53:45
1	SiO2†	2012.3	-156.6	-33.054	µg/L	-33.054	ppb	08:53:45
1	Si 251.611†	367.8	83.4	6.9913	µg/L	6.9913	ppb	08:53:45
1	Sn 189.927†	-341.0	-383.0	1.4798	µg/L	1.4798	ppb	08:53:45
1	Ti 334.940†	10736.9	10549.2	-5.3996	µg/L	-5.3996	ppb	08:53:25
1	Tl 190.801†	13.0	36.8	-24.150	µg/L	-24.150	ppb	08:53:45
1	U 409.014†	-158.7	65.6	-51.285	µg/L	-51.285	ppb	08:53:25
1	V 292.402†	-870.0	-795.4	0.3009	µg/L	0.3009	ppb	08:53:25
1	Zn 213.857†	1829.7	1258.2	-1.0154	µg/L	-1.0154	ppb	08:53:45
2	Sc RADIAL	75933.8	75933.8	98.8	%			08:52:58
2	Al 396.153Radial†	745925.5	754655.4	524370	µg/L	524370	ppb	08:52:52
2	Ca 317.933Radial†	631047.6	638157.7	502500	µg/L	502500	ppb	08:52:52
2	Fe 238.204 Radial†	13362.2	13502.2	193840	µg/L	193840	ppb	08:52:58
2	K 766.490 Radial†	326.0	-82.2	-54.543	µg/L	-54.543	ppb	08:52:58
2	Mg 279.077 IEC†	45695.9	46220.7	503530	µg/L	503530	ppb	08:52:58
2	Na 589.592 Radial†	584.8	46.7	13.412	µg/L	13.412	ppb	08:52:58
2	Sr 421.552†	1086.5	541.5	3.4408	µg/L	3.4408	ppb	08:52:58
2	Sc 361.383	1836647.0	1836647.0	94.507	%			08:53:51
2	Y 371.029	1147565.3	1147565.3	93.389	%			08:53:51
2	Ag 328.068†	-1924.9	-1981.7	-6.3229	µg/L	-6.3229	ppb	08:53:57
2	As 188.979†	-9.0	-10.0	-38.024	µg/L	-38.024	ppb	08:54:17
2	B 249.677†	2209.5	2222.7	6.9865	µg/L	6.9865	ppb	08:53:57
2	Ba 233.527†	211.0	237.8	6.8922	µg/L	6.8922	ppb	08:54:17
2	Be 313.107†	3053.4	-608.6	-0.4341	µg/L	-0.4341	ppb	08:53:57
2	Cd 226.502†	660.3	834.2	2.6503	µg/L	2.6503	ppb	08:54:17
2	Co 228.616†	-12.4	31.9	1.6913	µg/L	1.6913	ppb	08:54:17
2	Cr 267.716†	-131.3	-56.1	-1.3080	µg/L	-1.3080	ppb	08:54:17
2	Cu 324.752†	587.9	-3046.1	4.0407	µg/L	4.0407	ppb	08:53:57
2	Mn 257.610†	-2432.7	-2384.6	-3.1778	µg/L	-3.1778	ppb	08:53:57
2	Mo 202.031†	-89.4	-111.8	-6.6753	µg/L	-6.6753	ppb	08:54:17
2	Ni 231.604†	297.8	-20.3	1.2393	µg/L	1.2393	ppb	08:54:17
2	P 214.914†	218.0	28.2	60.382	µg/L	60.382	ppb	08:54:17
2	Pb 220.353†	-46.1	-104.7	-9.0869	µg/L	-9.0869	ppb	08:54:17

2	S 181.975 Axial†	61.6	39.6	227.17 µg/L	227.17 ppb	08:54:17
2	Sb 206.836†	62.1	43.3	14.568 µg/L	14.568 ppb	08:54:17
2	Se 196.026†	-420.6	-457.4	-61.589 µg/L	-61.589 ppb	08:54:17
2	SiO2†	2008.5	-153.6	-32.412 µg/L	-32.412 ppb	08:54:17
2	Si 251.611†	386.0	104.0	8.7216 µg/L	8.7216 ppb	08:54:17
2	Sn 189.927†	-333.1	-375.9	6.2047 µg/L	6.2047 ppb	08:54:17
2	Ti 334.940†	10742.6	10593.3	-5.3360 µg/L	-5.3360 ppb	08:53:57
2	Tl 190.801†	10.4	34.1	-29.066 µg/L	-29.066 ppb	08:54:17
2	U 409.014†	-86.5	141.4	-44.102 µg/L	-44.102 ppb	08:53:57
2	V 292.402†	-836.4	-762.9	0.6905 µg/L	0.6905 ppb	08:53:57
2	Zn 213.857†	1844.0	1279.8	-0.4164 µg/L	-0.4164 ppb	08:54:17
3	Sc RADIAL	75735.6	75735.6	98.6 %		08:53:09
3	Al 396.153Radial†	746305.3	757016.3	526010 µg/L	526010 ppb	08:53:03
3	Ca 317.933Radial†	629993.4	638759.7	502970 µg/L	502970 ppb	08:53:03
3	Fe 238.204 Radial†	13382.8	13558.5	194650 µg/L	194650 ppb	08:53:09
3	K 766.490 Radial†	340.8	-66.3	-44.028 µg/L	-44.028 ppb	08:53:09
3	Mg 279.077 IEC†	45682.7	46328.3	504700 µg/L	504700 ppb	08:53:09
3	Na 589.592 Radial†	522.2	-15.3	-4.3923 µg/L	-4.3923 ppb	08:53:09
3	Sr 421.552†	1123.7	582.1	3.6984 µg/L	3.6984 ppb	08:53:09
3	Sc 361.383	1842417.1	1842417.1	94.804 %		08:54:24
3	Y 371.029	1152634.8	1152634.8	93.802 %		08:54:24
3	Ag 328.068†	-1949.8	-2001.6	-6.4621 µg/L	-6.4621 ppb	08:54:29
3	As 188.979†	-7.6	-8.6	-34.578 µg/L	-34.578 ppb	08:54:50
3	B 249.677†	2197.6	2202.9	5.5989 µg/L	5.5989 ppb	08:54:29
3	Ba 233.527†	207.9	233.8	6.7748 µg/L	6.7748 ppb	08:54:50
3	Be 313.107†	3071.7	-599.4	-0.4279 µg/L	-0.4279 ppb	08:54:29
3	Cd 226.502†	633.5	803.7	1.6613 µg/L	1.6613 ppb	08:54:50
3	Co 228.616†	-5.8	38.9	2.0803 µg/L	2.0803 ppb	08:54:50
3	Cr 267.716†	-98.9	-21.5	-0.5048 µg/L	-0.5048 ppb	08:54:50
3	Cu 324.752†	606.9	-3028.1	4.2888 µg/L	4.2888 ppb	08:54:29
3	Mn 257.610†	-2385.5	-2326.8	-2.9035 µg/L	-2.9035 ppb	08:54:29
3	Mo 202.031†	-85.8	-107.7	-6.1290 µg/L	-6.1290 ppb	08:54:50
3	Ni 231.604†	308.7	-9.8	1.9103 µg/L	1.9103 ppb	08:54:50
3	P 214.914†	211.0	20.1	40.695 µg/L	40.695 ppb	08:54:50
3	Pb 220.353†	-46.5	-105.0	-9.0913 µg/L	-9.0913 ppb	08:54:50
3	S 181.975 Axial†	65.1	43.1	247.23 µg/L	247.23 ppb	08:54:50
3	Sb 206.836†	52.7	33.2	3.3537 µg/L	3.3537 ppb	08:54:50
3	Se 196.026†	-407.0	-441.7	-33.988 µg/L	-33.988 ppb	08:54:50
3	SiO2†	2012.8	-155.7	-32.858 µg/L	-32.858 ppb	08:54:50
3	Si 251.611†	360.2	75.4	6.3241 µg/L	6.3241 ppb	08:54:50
3	Sn 189.927†	-342.3	-384.5	1.6001 µg/L	1.6001 ppb	08:54:50
3	Ti 334.940†	10960.7	10787.7	-4.9362 µg/L	-4.9362 ppb	08:54:29
3	Tl 190.801†	13.3	37.1	-24.079 µg/L	-24.079 ppb	08:54:50
3	U 409.014†	-104.8	122.4	-46.059 µg/L	-46.059 ppb	08:54:29
3	V 292.402†	-893.1	-820.0	0.0271 µg/L	0.0271 ppb	08:54:29
3	Zn 213.857†	1830.5	1259.6	-1.1148 µg/L	-1.1148 ppb	08:54:50

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1840626.4	94.712	%	0.1776				0.19%
Sc RADIAL	75839.4	98.7	%	0.13				0.13%
Y 371.029	1150560.3	93.633	%	0.2162				0.23%
Ag 328.068†	-1997.9	-6.4484	µg/L	0.11925	-6.4484	ppb	0.11925	1.85%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	754875.4	524530	µg/L	1417.3	524530	ppb	1417.3	0.27%
QC value within limits for Al 396.153Radial Recovery = 104.91%								
As 188.979†	-7.9	-32.951	µg/L	6.0520	-32.951	ppb	6.0520	18.37%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2209.7	6.1214	µg/L	0.75460	6.1214	ppb	0.75460	12.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	238.1	6.8985	µg/L	0.12707	6.8985	ppb	0.12707	1.84%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-618.6	-0.4411	µg/L	0.01782	-0.4411	ppb	0.01782	4.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	637513.0	501990	µg/L	1311.5	501990	ppb	1311.5	0.26%
QC value within limits for Ca 317.933Radial Recovery = 100.40%								
Cd 226.502†	820.6	2.1997	µg/L	0.50032	2.1997	ppb	0.50032	22.74%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	41.0	2.1967	µg/L	0.57250	2.1967	ppb	0.57250	26.06%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -32.1     -0.7517 µg/L       0.48284     -0.7517 ppb        0.48284  64.24%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -3019.3      4.3044 µg/L       0.27189      4.3044 ppb        0.27189   6.32%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     13533.3      194290 µg/L         410.6      194290 ppb          410.6   0.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 97.14%
K 766.490 Radial†        -94.6     -62.816 µg/L       24.0181     -62.816 ppb        24.0181  38.24%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        46226.3      503590 µg/L        1083.2      503590 ppb         1083.2   0.22%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.72%
Mn 257.610†            -2355.7     -3.0140 µg/L       0.14470     -3.0140 ppb        0.14470   4.80%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -113.2     -6.8296 µg/L       0.78908     -6.8296 ppb        0.78908  11.55%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        9.2      2.6490 µg/L       9.46729      2.6490 ppb        9.46729 357.39%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -16.5      1.4819 µg/L       0.37213      1.4819 ppb        0.37213  25.11%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                25.6      53.801 µg/L       11.3499      53.801 ppb        11.3499  21.10%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -106.2     -9.5167 µg/L       0.74063     -9.5167 ppb        0.74063   7.78%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          42.0      240.89 µg/L        11.898      240.89 ppb         11.898   4.94%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               42.6      13.771 µg/L       10.0427      13.771 ppb        10.0427  72.93%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -448.4     -45.712 µg/L       14.2612     -45.712 ppb        14.2612  31.20%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -155.3     -32.775 µg/L        0.3289     -32.775 ppb         0.3289   1.00%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               87.6      7.3457 µg/L       1.23740      7.3457 ppb        1.23740  16.85%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -381.1      3.0948 µg/L       2.69386      3.0948 ppb        2.69386  87.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              565.1      3.5907 µg/L       0.13390      3.5907 ppb        0.13390   3.73%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            10643.4     -5.2239 µg/L       0.25121     -5.2239 ppb        0.25121   4.81%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               36.0     -25.765 µg/L        2.8592     -25.765 ppb         2.8592  11.10%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               109.8     -47.149 µg/L        3.7135     -47.149 ppb         3.7135   7.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -792.7      0.3395 µg/L       0.33339      0.3395 ppb        0.33339  98.21%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             1265.9     -0.8489 µg/L       0.37780     -0.8489 ppb        0.37780  44.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 1/27/2010 08:54:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75550.8	75550.8	98.3	%			08:55:38
1	Al 396.153Radial†	748321.0	760917.0	528710	µg/L	528710	ppb	08:55:33
1	Ca 317.933Radial†	632068.2	642432.1	505860	µg/L	505860	ppb	08:55:33
1	Fe 238.204 Radial†	13568.8	13780.8	197850	µg/L	197850	ppb	08:55:38
1	K 766.490 Radial†	8266.6	7993.5	5306.4	µg/L	5306.4	ppb	08:55:38
1	Mg 279.077 IEC†	46355.5	47125.7	513400	µg/L	513400	ppb	08:55:38
1	Na 589.592 Radial†	18553.0	18319.7	5260.7	µg/L	5260.7	ppb	08:55:38
1	Sr 421.552†	81816.6	82633.0	525.04	µg/L	525.04	ppb	08:55:33
1	Sc 361.383	1827534.5	1827534.5	94.038	%			08:56:12
1	Y 371.029	1143714.8	1143714.8	93.076	%			08:56:12
1	Ag 328.068†	25067.8	26712.1	264.90	µg/L	264.90	ppb	08:56:17
1	As 188.979†	213.4	226.4	506.61	µg/L	506.61	ppb	08:56:38
1	B 249.677†	12550.6	13231.0	541.26	µg/L	541.26	ppb	08:56:17
1	Ba 233.527†	16981.7	18072.8	526.01	µg/L	526.01	ppb	08:56:17
1	Be 313.107†	342188.8	360043.0	250.64	µg/L	250.64	ppb	08:56:12
1	Cd 226.502†	16151.5	17310.9	487.68	µg/L	487.68	ppb	08:56:17
1	Co 228.616†	7872.8	8416.9	463.87	µg/L	463.87	ppb	08:56:38
1	Cr 267.716†	20535.7	21920.3	508.76	µg/L	508.76	ppb	08:56:17
1	Cu 324.752†	71349.1	72204.2	570.39	µg/L	570.39	ppb	08:56:17
1	Mn 257.610†	123924.4	131970.2	493.30	µg/L	493.30	ppb	08:56:17
1	Mo 202.031†	3764.6	3986.1	508.18	µg/L	508.18	ppb	08:56:38
1	Ni 231.604†	7186.7	7306.9	462.40	µg/L	462.40	ppb	08:56:38
1	P 214.914†	1261.8	1139.3	2666.7	µg/L	2666.7	ppb	08:56:38
1	Pb 220.353†	1586.8	1631.5	497.34	µg/L	497.34	ppb	08:56:38
1	S 181.975 Axial†	509.9	516.7	2961.9	µg/L	2961.9	ppb	08:56:38
1	Sb 206.836†	508.0	517.8	542.16	µg/L	542.16	ppb	08:56:38
1	Se 196.026†	1103.2	1160.7	2507.0	µg/L	2507.0	ppb	08:56:38
1	SiO2†	53181.3	54274.0	11456	µg/L	11456	ppb	08:56:17
1	Si 251.611†	60421.0	63947.0	5363.7	µg/L	5363.7	ppb	08:56:17
1	Sn 189.927†	541.6	552.6	551.16	µg/L	551.16	ppb	08:56:38
1	Ti 334.940†	204861.3	217075.2	508.90	µg/L	508.90	ppb	08:56:17
1	Tl 190.801†	286.7	328.0	482.00	µg/L	482.00	ppb	08:56:38
1	U 409.014†	4801.9	5339.3	451.16	µg/L	451.16	ppb	08:56:17
1	V 292.402†	39287.2	41900.0	537.07	µg/L	537.07	ppb	08:56:17
1	Zn 213.857†	17804.0	18261.4	490.95	µg/L	490.95	ppb	08:56:17
2	Sc RADIAL	74638.0	74638.0	97.2	%			08:55:49
2	Al 396.153Radial†	750422.4	772385.3	536680	µg/L	536680	ppb	08:55:44
2	Ca 317.933Radial†	633173.4	651429.5	512950	µg/L	512950	ppb	08:55:44
2	Fe 238.204 Radial†	13439.4	13816.3	198360	µg/L	198360	ppb	08:55:49
2	K 766.490 Radial†	8178.5	8005.5	5314.4	µg/L	5314.4	ppb	08:55:49
2	Mg 279.077 IEC†	45878.4	47211.1	514330	µg/L	514330	ppb	08:55:49
2	Na 589.592 Radial†	18414.1	18407.4	5285.9	µg/L	5285.9	ppb	08:55:49
2	Sr 421.552†	82019.1	83858.8	532.83	µg/L	532.83	ppb	08:55:44
2	Sc 361.383	1820670.0	1820670.0	93.685	%			08:56:44
2	Y 371.029	1139248.7	1139248.7	92.712	%			08:56:44
2	Ag 328.068†	25242.5	26999.0	267.64	µg/L	267.64	ppb	08:56:50
2	As 188.979†	213.7	227.6	509.04	µg/L	509.04	ppb	08:57:11
2	B 249.677†	12643.9	13381.0	548.30	µg/L	548.30	ppb	08:56:50
2	Ba 233.527†	17045.2	18208.7	529.97	µg/L	529.97	ppb	08:56:50
2	Be 313.107†	340227.7	359321.6	250.14	µg/L	250.14	ppb	08:56:44
2	Cd 226.502†	16247.3	17477.9	492.55	µg/L	492.55	ppb	08:56:50
2	Co 228.616†	7901.7	8479.3	467.31	µg/L	467.31	ppb	08:57:11
2	Cr 267.716†	20676.1	22152.6	514.15	µg/L	514.15	ppb	08:56:50
2	Cu 324.752†	72048.9	73237.2	578.23	µg/L	578.23	ppb	08:56:50
2	Mn 257.610†	124670.3	133263.3	498.11	µg/L	498.11	ppb	08:56:50
2	Mo 202.031†	3766.1	4002.8	510.30	µg/L	510.30	ppb	08:57:11
2	Ni 231.604†	7218.0	7369.1	466.32	µg/L	466.32	ppb	08:57:11
2	P 214.914†	1261.3	1143.9	2678.8	µg/L	2678.8	ppb	08:57:11
2	Pb 220.353†	1607.4	1659.8	506.01	µg/L	506.01	ppb	08:57:11

2	S 181.975 Axial†	514.3	523.4	3000.5 µg/L	3000.5 ppb	08:57:11
2	Sb 206.836†	519.4	532.0	557.44 µg/L	557.44 ppb	08:57:11
2	Se 196.026†	1101.5	1163.3	2514.4 µg/L	2514.4 ppb	08:57:11
2	SiO2†	53503.4	54831.1	11573 µg/L	11573 ppb	08:56:50
2	Si 251.611†	60806.6	64600.8	5418.5 µg/L	5418.5 ppb	08:56:50
2	Sn 189.927†	547.6	561.1	557.91 µg/L	557.91 ppb	08:57:11
2	Ti 334.940†	206113.6	219233.2	514.32 µg/L	514.32 ppb	08:56:50
2	Tl 190.801†	291.8	334.5	492.28 µg/L	492.28 ppb	08:57:11
2	U 409.014†	4798.3	5354.7	452.13 µg/L	452.13 ppb	08:56:50
2	V 292.402†	39508.2	42293.5	542.02 µg/L	542.02 ppb	08:56:50
2	Zn 213.857†	17912.7	18448.8	496.31 µg/L	496.31 ppb	08:56:50
3	Sc RADIAL	74598.0	74598.0	97.1 %		08:56:01
3	Al 396.153Radial†	750572.4	772953.5	537080 µg/L	537080 ppb	08:55:55
3	Ca 317.933Radial†	633253.0	651860.5	513290 µg/L	513290 ppb	08:55:55
3	Fe 238.204 Radial†	13515.5	13902.1	199590 µg/L	199590 ppb	08:56:01
3	K 766.490 Radial†	8161.2	7992.2	5305.5 µg/L	5305.5 ppb	08:56:01
3	Mg 279.077 IEC†	46106.3	47471.1	517160 µg/L	517160 ppb	08:56:01
3	Na 589.592 Radial†	18464.1	18469.0	5303.6 µg/L	5303.6 ppb	08:56:01
3	Sr 421.552†	82085.6	83972.5	533.55 µg/L	533.55 ppb	08:55:55
3	Sc 361.383	1845921.4	1845921.4	94.984 %		08:57:17
3	Y 371.029	1153635.5	1153635.5	93.883 %		08:57:17
3	Ag 328.068†	25156.0	26539.4	263.37 µg/L	263.37 ppb	08:57:23
3	As 188.979†	205.4	215.7	481.69 µg/L	481.69 ppb	08:57:44
3	B 249.677†	12533.9	13080.5	533.03 µg/L	533.03 ppb	08:57:23
3	Ba 233.527†	17021.1	17934.4	521.98 µg/L	521.98 ppb	08:57:23
3	Be 313.107†	342872.9	357138.6	248.62 µg/L	248.62 ppb	08:57:17
3	Cd 226.502†	16103.2	17089.0	480.95 µg/L	480.95 ppb	08:57:23
3	Co 228.616†	7892.6	8354.3	460.43 µg/L	460.43 ppb	08:57:44
3	Cr 267.716†	20566.9	21735.7	504.47 µg/L	504.47 ppb	08:57:23
3	Cu 324.752†	71701.5	71819.5	567.74 µg/L	567.74 ppb	08:57:23
3	Mn 257.610†	124320.6	131074.8	490.07 µg/L	490.07 ppb	08:57:23
3	Mo 202.031†	3773.5	3955.6	504.41 µg/L	504.41 ppb	08:57:44
3	Ni 231.604†	7217.5	7263.2	459.67 µg/L	459.67 ppb	08:57:44
3	P 214.914†	1263.9	1128.2	2641.3 µg/L	2641.3 ppb	08:57:44
3	Pb 220.353†	1608.1	1637.0	499.35 µg/L	499.35 ppb	08:57:44
3	S 181.975 Axial†	506.6	507.9	2911.2 µg/L	2911.2 ppb	08:57:44
3	Sb 206.836†	509.6	514.1	537.56 µg/L	537.56 ppb	08:57:44
3	Se 196.026†	1108.5	1154.6	2504.3 µg/L	2504.3 ppb	08:57:44
3	SiO2†	53388.5	53928.9	11383 µg/L	11383 ppb	08:57:23
3	Si 251.611†	60471.9	63360.6	5314.5 µg/L	5314.5 ppb	08:57:23
3	Sn 189.927†	544.1	549.4	551.84 µg/L	551.84 ppb	08:57:44
3	Ti 334.940†	205493.7	215570.9	504.97 µg/L	504.97 ppb	08:57:23
3	Tl 190.801†	289.8	328.2	481.19 µg/L	481.19 ppb	08:57:44
3	U 409.014†	4815.9	5303.2	447.02 µg/L	447.02 ppb	08:57:23
3	V 292.402†	39287.1	41483.7	531.94 µg/L	531.94 ppb	08:57:23
3	Zn 213.857†	17861.9	18133.8	486.95 µg/L	486.95 ppb	08:57:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1831375.3	94.236	%	0.6718				0.71%
Sc RADIAL	74929.0	97.5	%	0.70				0.72%
Y 371.029	1145533.0	93.224	%	0.5993				0.64%
Ag 328.068†	26750.2	265.30	µg/L	2.165	265.30	ppb	2.165	0.82%
QC value within limits for Ag 328.068 Recovery = 106.12%								
Al 396.153Radial†	768751.9	534160	µg/L	4718.9	534160	ppb	4718.9	0.88%
QC value within limits for Al 396.153Radial Recovery = 106.83%								
As 188.979†	223.2	499.11	µg/L	15.141	499.11	ppb	15.141	3.03%
QC value within limits for As 188.979 Recovery = 99.82%								
B 249.677†	13230.9	540.86	µg/L	7.646	540.86	ppb	7.646	1.41%
QC value within limits for B 249.677 Recovery = 108.17%								
Ba 233.527†	18071.9	525.99	µg/L	3.994	525.99	ppb	3.994	0.76%
QC value within limits for Ba 233.527 Recovery = 105.20%								
Be 313.107†	358834.4	249.80	µg/L	1.052	249.80	ppb	1.052	0.42%
QC value within limits for Be 313.107 Recovery = 99.92%								
Ca 317.933Radial†	648574.0	510700	µg/L	4191.8	510700	ppb	4191.8	0.82%
QC value within limits for Ca 317.933Radial Recovery = 102.14%								
Cd 226.502†	17292.6	487.06	µg/L	5.822	487.06	ppb	5.822	1.20%
QC value within limits for Cd 226.502 Recovery = 97.41%								
Co 228.616†	8416.9	463.87	µg/L	3.442	463.87	ppb	3.442	0.74%

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   QC value within limits for Co 228.616  Recovery = 92.77%
Cr 267.716†            21936.2      509.13 µg/L        4.848      509.13 ppb        4.848   0.95%
   QC value within limits for Cr 267.716  Recovery = 101.83%
Cu 324.752†            72420.3      572.12 µg/L        5.454      572.12 ppb        5.454   0.95%
   QC value within limits for Cu 324.752  Recovery = 114.42%
Fe 238.204 Radial†     13833.1      198600 µg/L        895.5      198600 ppb        895.5   0.45%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.30%
K 766.490 Radial†       7997.1      5308.8 µg/L         4.88      5308.8 ppb         4.88   0.09%
   QC value within limits for K 766.490 Radial  Recovery = 106.18%
Mg 279.077 IEC†        47269.3      514960 µg/L       1959.7      514960 ppb       1959.7   0.38%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.99%
Mn 257.610†           132102.8      493.83 µg/L        4.043      493.83 ppb        4.043   0.82%
   QC value within limits for Mn 257.610  Recovery = 98.77%
Mo 202.031†             3981.5      507.63 µg/L        2.981      507.63 ppb        2.981   0.59%
   QC value within limits for Mo 202.031  Recovery = 101.53%
Na 589.592 Radial†     18398.7      5283.4 µg/L        21.55      5283.4 ppb        21.55   0.41%
   QC value within limits for Na 589.592 Radial  Recovery = 105.67%
Ni 231.604†             7313.1      462.80 µg/L        3.342      462.80 ppb        3.342   0.72%
   QC value within limits for Ni 231.604  Recovery = 92.56%
P 214.914†              1137.1      2662.3 µg/L        19.10      2662.3 ppb        19.10   0.72%
   QC value within limits for P 214.914  Recovery = 106.49%
Pb 220.353†             1642.8      500.90 µg/L        4.537      500.90 ppb        4.537   0.91%
   QC value within limits for Pb 220.353  Recovery = 100.18%
S 181.975 Axial†         516.0      2957.9 µg/L        44.80      2957.9 ppb        44.80   1.51%
   QC value within limits for S 181.975 Axial  Recovery = 118.31%
Sb 206.836†              521.3      545.72 µg/L       10.406      545.72 ppb       10.406   1.91%
   QC value within limits for Sb 206.836  Recovery = 109.14%
Se 196.026†             1159.5      2508.6 µg/L         5.21      2508.6 ppb         5.21   0.21%
   QC value within limits for Se 196.026  Recovery = 100.34%
SiO2†                  54344.7       11471 µg/L         96.1       11471 ppb         96.1   0.84%
   QC value within limits for SiO2  Recovery = 107.25%
Si 251.611†            63969.5      5365.6 µg/L        52.04      5365.6 ppb        52.04   0.97%
   QC value within limits for Si 251.611  Recovery = 107.31%
Sn 189.927†              554.4      553.64 µg/L        3.717      553.64 ppb        3.717   0.67%
   QC value within limits for Sn 189.927  Recovery = 110.73%
Sr 421.552†            83488.1      530.48 µg/L        4.719      530.48 ppb        4.719   0.89%
   QC value within limits for Sr 421.552  Recovery = 106.10%
Ti 334.940†           217293.1      509.40 µg/L        4.696      509.40 ppb        4.696   0.92%
   QC value within limits for Ti 334.940  Recovery = 101.88%
Tl 190.801†              330.2      485.16 µg/L        6.187      485.16 ppb        6.187   1.28%
   QC value within limits for Tl 190.801  Recovery = 97.03%
U 409.014†              5332.4      450.11 µg/L        2.714      450.11 ppb        2.714   0.60%
   QC value within limits for U 409.014  Recovery = 90.02%
V 292.402†             41892.4      537.01 µg/L        5.039      537.01 ppb        5.039   0.94%
   QC value within limits for V 292.402  Recovery = 107.40%
Zn 213.857†            18281.3      491.41 µg/L        4.695      491.41 ppb        4.695   0.96%
   QC value within limits for Zn 213.857  Recovery = 98.28%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 1/27/2010 08:57:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	74075.3	74075.3	96.4	%			08:58:33
1	Al 396.153Radial†	739137.1	766548.6	532640	µg/L	532640	ppb	08:58:28
1	Ca 317.933Radial†	629490.7	652560.4	513840	µg/L	513840	ppb	08:58:28
1	Fe 238.204 Radial†	32125.2	33299.5	478060	µg/L	478060	ppb	08:58:33
1	K 766.490 Radial†	257.8	-144.7	-96.039	µg/L	-96.039	ppb	08:58:33
1	Mg 279.077 IEC†	44900.3	46555.5	506870	µg/L	506870	ppb	08:58:33
1	Na 589.592 Radial†	1700122.4	1762563.6	506140	µg/L	506140	ppb	08:58:28
1	Sr 421.552†	1311.6	802.5	5.0990	µg/L	5.0990	ppb	08:58:33
1	Sc 361.383	1801363.6	1801363.6	92.692	%			08:59:08
1	Y 371.029	1119534.0	1119534.0	91.108	%			08:59:08
1	Ag 328.068†	-3791.2	-4035.0	-7.7804	µg/L	-7.7804	ppb	08:59:14
1	As 188.979†	-18.9	-20.9	-47.226	µg/L	-47.226	ppb	08:59:34
1	B 249.677†	5123.0	5411.7	13.835	µg/L	13.835	ppb	08:59:14
1	Ba 233.527†	467.6	519.0	15.001	µg/L	15.001	ppb	08:59:34
1	Be 313.107†	-960.8	-4876.0	-3.4083	µg/L	-3.4083	ppb	08:59:14
1	Cd 226.502†	1740.8	2013.5	5.2460	µg/L	5.2460	ppb	08:59:14
1	Co 228.616†	111.8	165.6	9.0515	µg/L	9.0515	ppb	08:59:34
1	Cr 267.716†	192.2	290.2	6.7026	µg/L	6.7026	ppb	08:59:34
1	Cu 324.752†	-4334.0	-8343.9	3.7135	µg/L	3.7135	ppb	08:59:14
1	Mn 257.610†	-12804.7	-13624.8	-7.0466	µg/L	-7.0466	ppb	08:59:14
1	Mo 202.031†	-217.7	-252.0	-13.490	µg/L	-13.490	ppb	08:59:34
1	Ni 231.604†	260.5	-54.4	2.7770	µg/L	2.7770	ppb	08:59:34
1	P 214.914†	378.9	206.3	261.97	µg/L	261.97	ppb	08:59:34
1	Pb 220.353†	61.1	10.0	-1.3691	µg/L	-1.3691	ppb	08:59:34
1	S 181.975 Axial†	54.4	33.2	190.13	µg/L	190.13	ppb	08:59:34
1	Sb 206.836†	56.1	38.2	7.7505	µg/L	7.7505	ppb	08:59:34
1	Se 196.026†	-1148.7	-1251.6	-226.81	µg/L	-226.81	ppb	08:59:34
1	SiO2†	1530.9	-627.2	-132.38	µg/L	-132.38	ppb	08:59:34
1	Si 251.611†	-281.6	-608.3	-51.019	µg/L	-51.019	ppb	08:59:34
1	Sn 189.927†	-374.0	-426.9	5.7349	µg/L	5.7349	ppb	08:59:34
1	Ti 334.940†	11564.3	11702.5	-2.6766	µg/L	-2.6766	ppb	08:59:14
1	Tl 190.801†	12.1	36.1	-22.295	µg/L	-22.295	ppb	08:59:34
1	U 409.014†	143954.4	155537.6	14745	µg/L	14745	ppb	08:59:08
1	V 292.402†	-3342.3	-3483.7	-2.7891	µg/L	-2.7891	ppb	08:59:14
1	Zn 213.857†	3016.6	2583.1	23.945	µg/L	23.945	ppb	08:59:34
2	Sc RADIAL	74358.4	74358.4	96.8	%			08:58:45
2	Al 396.153Radial†	738176.4	762638.4	529920	µg/L	529920	ppb	08:58:40
2	Ca 317.933Radial†	628111.5	648650.7	510760	µg/L	510760	ppb	08:58:40
2	Fe 238.204 Radial†	32231.4	33282.4	477820	µg/L	477820	ppb	08:58:45
2	K 766.490 Radial†	324.1	-77.1	-51.207	µg/L	-51.207	ppb	08:58:45
2	Mg 279.077 IEC†	45012.7	46494.3	506210	µg/L	506210	ppb	08:58:45
2	Na 589.592 Radial†	1699359.1	1755063.8	503990	µg/L	503990	ppb	08:58:40
2	Sr 421.552†	1313.9	799.7	5.0815	µg/L	5.0815	ppb	08:58:45
2	Sc 361.383	1820153.5	1820153.5	93.658	%			08:59:41
2	Y 371.029	1131986.5	1131986.5	92.121	%			08:59:41
2	Ag 328.068†	-3739.5	-3937.7	-6.8872	µg/L	-6.8872	ppb	08:59:47
2	As 188.979†	-9.2	-10.3	-22.607	µg/L	-22.607	ppb	09:00:07
2	B 249.677†	5107.4	5338.0	10.378	µg/L	10.378	ppb	08:59:47
2	Ba 233.527†	463.9	509.8	14.733	µg/L	14.733	ppb	09:00:07
2	Be 313.107†	-872.6	-4771.1	-3.3352	µg/L	-3.3352	ppb	08:59:47
2	Cd 226.502†	1694.4	1944.6	3.2465	µg/L	3.2465	ppb	08:59:47
2	Co 228.616†	116.8	169.7	9.2762	µg/L	9.2762	ppb	09:00:07
2	Cr 267.716†	187.2	282.7	6.5293	µg/L	6.5293	ppb	09:00:07
2	Cu 324.752†	-4427.7	-8395.7	3.2902	µg/L	3.2902	ppb	08:59:47
2	Mn 257.610†	-12846.1	-13526.4	-6.6892	µg/L	-6.6892	ppb	08:59:47
2	Mo 202.031†	-230.3	-263.1	-14.884	µg/L	-14.884	ppb	09:00:07
2	Ni 231.604†	264.8	-52.7	2.8805	µg/L	2.8805	ppb	09:00:07
2	P 214.914†	391.2	215.2	282.88	µg/L	282.88	ppb	09:00:07
2	Pb 220.353†	64.3	12.7	-0.6803	µg/L	-0.6803	ppb	09:00:07

2	S 181.975 Axial†	65.6	44.5	255.26 µg/L	255.26 ppb	09:00:07
2	Sb 206.836†	48.6	29.5	-1.6856 µg/L	-1.6856 ppb	09:00:07
2	Se 196.026†	-1147.4	-1237.5	-205.94 µg/L	-205.94 ppb	09:00:07
2	SiO2†	1537.2	-637.5	-134.57 µg/L	-134.57 ppb	09:00:07
2	Si 251.611†	-258.9	-580.9	-48.724 µg/L	-48.724 ppb	09:00:07
2	Sn 189.927†	-374.3	-423.1	7.1705 µg/L	7.1705 ppb	09:00:07
2	Ti 334.940†	11690.1	11707.9	-2.6595 µg/L	-2.6595 ppb	08:59:47
2	Tl 190.801†	1.5	24.7	-41.414 µg/L	-41.414 ppb	09:00:07
2	U 409.014†	144885.8	154928.8	14687 µg/L	14687 ppb	08:59:41
2	V 292.402†	-3364.2	-3469.8	-2.7007 µg/L	-2.7007 ppb	08:59:47
2	Zn 213.857†	3028.2	2561.9	23.376 µg/L	23.376 ppb	09:00:07
3	Sc RADIAL	74134.8	74134.8	96.5 %		08:58:57
3	Al 396.153Radial†	736230.3	762921.9	530120 µg/L	530120 ppb	08:58:51
3	Ca 317.933Radial†	624586.7	646955.3	509430 µg/L	509430 ppb	08:58:51
3	Fe 238.204 Radial†	32217.1	33368.0	479050 µg/L	479050 ppb	08:58:57
3	K 766.490 Radial†	303.2	-97.8	-64.922 µg/L	-64.922 ppb	08:58:57
3	Mg 279.077 IEC†	44945.2	46564.7	506970 µg/L	506970 ppb	08:58:57
3	Na 589.592 Radial†	1695729.6	1756598.1	504430 µg/L	504430 ppb	08:58:51
3	Sr 421.552†	1288.6	777.6	4.9405 µg/L	4.9405 ppb	08:58:57
3	Sc 361.383	1816386.2	1816386.2	93.465 %		09:00:14
3	Y 371.029	1129814.7	1129814.7	91.945 %		09:00:14
3	Ag 328.068†	-3787.5	-3997.2	-7.3667 µg/L	-7.3667 ppb	09:00:20
3	As 188.979†	-13.6	-15.1	-33.575 µg/L	-33.575 ppb	09:00:40
3	B 249.677†	5143.4	5387.9	12.164 µg/L	12.164 ppb	09:00:20
3	Ba 233.527†	449.7	495.6	14.321 µg/L	14.321 ppb	09:00:40
3	Be 313.107†	-966.7	-4873.8	-3.4068 µg/L	-3.4068 ppb	09:00:20
3	Cd 226.502†	1714.7	1970.0	3.8572 µg/L	3.8572 ppb	09:00:20
3	Co 228.616†	128.7	182.7	9.9944 µg/L	9.9944 ppb	09:00:40
3	Cr 267.716†	225.1	323.6	7.4791 µg/L	7.4791 ppb	09:00:40
3	Cu 324.752†	-4461.8	-8442.0	3.1131 µg/L	3.1131 ppb	09:00:20
3	Mn 257.610†	-12874.0	-13584.7	-6.7719 µg/L	-6.7719 ppb	09:00:20
3	Mo 202.031†	-221.7	-254.4	-13.751 µg/L	-13.751 ppb	09:00:40
3	Ni 231.604†	271.2	-45.2	3.3666 µg/L	3.3666 ppb	09:00:40
3	P 214.914†	382.7	206.9	262.17 µg/L	262.17 ppb	09:00:40
3	Pb 220.353†	59.2	7.5	-2.2884 µg/L	-2.2884 ppb	09:00:40
3	S 181.975 Axial†	44.6	22.2	127.27 µg/L	127.27 ppb	09:00:40
3	Sb 206.836†	50.2	31.3	0.4562 µg/L	0.4562 ppb	09:00:40
3	Se 196.026†	-1149.3	-1242.0	-208.97 µg/L	-208.97 ppb	09:00:40
3	SiO2†	1539.9	-631.2	-133.22 µg/L	-133.22 ppb	09:00:40
3	Si 251.611†	-278.7	-602.7	-50.554 µg/L	-50.554 ppb	09:00:40
3	Sn 189.927†	-374.0	-423.6	6.8229 µg/L	6.8229 ppb	09:00:40
3	Ti 334.940†	11713.5	11758.9	-2.6145 µg/L	-2.6145 ppb	09:00:20
3	Tl 190.801†	2.7	26.0	-39.027 µg/L	-39.027 ppb	09:00:40
3	U 409.014†	145084.5	155462.2	14738 µg/L	14738 ppb	09:00:14
3	V 292.402†	-3377.4	-3491.4	-2.8406 µg/L	-2.8406 ppb	09:00:20
3	Zn 213.857†	3048.0	2589.8	24.088 µg/L	24.088 ppb	09:00:40

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1812634.4	93.272	%	0.5115				0.55%
Sc RADIAL	74189.5	96.6	%	0.19				0.20%
Y 371.029	1127111.8	91.725	%	0.5413				0.59%
Ag 328.068†	-3990.0	-7.3447	µg/L	0.44699	-7.3447	ppb	0.44699	6.09%
Al 396.153Radial†	764036.3	530890	µg/L	1515.0	530890	ppb	1515.0	0.29%
QC value within limits for Al 396.153Radial Recovery = 106.18%								
As 188.979†	-15.5	-34.469	µg/L	12.3339	-34.469	ppb	12.3339	35.78%
B 249.677†	5379.2	12.126	µg/L	1.7285	12.126	ppb	1.7285	14.25%
Ba 233.527†	508.2	14.685	µg/L	0.3429	14.685	ppb	0.3429	2.33%
Be 313.107†	-4840.3	-3.3834	µg/L	0.04177	-3.3834	ppb	0.04177	1.23%
Ca 317.933Radial†	649388.8	511340	µg/L	2263.5	511340	ppb	2263.5	0.44%
QC value within limits for Ca 317.933Radial Recovery = 102.27%								
Cd 226.502†	1976.0	4.1165	µg/L	1.02465	4.1165	ppb	1.02465	24.89%
Co 228.616†	172.7	9.4407	µg/L	0.49250	9.4407	ppb	0.49250	5.22%
Cr 267.716†	298.8	6.9037	µg/L	0.50578	6.9037	ppb	0.50578	7.33%
Cu 324.752†	-8393.9	3.3723	µg/L	0.30850	3.3723	ppb	0.30850	9.15%
Fe 238.204 Radial†	33316.6	478310	µg/L	650.5	478310	ppb	650.5	0.14%
QC value within limits for Fe 238.204 Radial Recovery = 95.66%								
K 766.490 Radial†	-106.5	-70.722	µg/L	22.9719	-70.722	ppb	22.9719	32.48%
Mg 279.077 IEC†	46538.2	506690	µg/L	416.4	506690	ppb	416.4	0.08%

QC value within limits for Mg 279.077 IEC Recovery = 101.34%

Mn 257.610†	-13578.6	-6.8359	µg/L	0.18708	-6.8359	ppb	0.18708	2.74%
Mo 202.031†	-256.5	-14.042	µg/L	0.7409	-14.042	ppb	0.7409	5.28%
Na 589.592 Radial†	1758075.2	504850	µg/L	1137.8	504850	ppb	1137.8	0.23%

QC value within limits for Na 589.592 Radial Recovery = 100.97%

Ni 231.604†	-50.8	3.0080	µg/L	0.31482	3.0080	ppb	0.31482	10.47%
P 214.914†	209.5	269.01	µg/L	12.013	269.01	ppb	12.013	4.47%
Pb 220.353†	10.1	-1.4460	µg/L	0.80676	-1.4460	ppb	0.80676	55.79%
S 181.975 Axial†	33.3	190.89	µg/L	63.997	190.89	ppb	63.997	33.53%
Sb 206.836†	33.0	2.1737	µg/L	4.94696	2.1737	ppb	4.94696	227.58%
Se 196.026†	-1243.7	-213.91	µg/L	11.275	-213.91	ppb	11.275	5.27%
SiO2†	-632.0	-133.39	µg/L	1.100	-133.39	ppb	1.100	0.82%
Si 251.611†	-597.3	-50.099	µg/L	1.2130	-50.099	ppb	1.2130	2.42%
Sn 189.927†	-424.5	6.5761	µg/L	0.74897	6.5761	ppb	0.74897	11.39%
Sr 421.552†	793.3	5.0404	µg/L	0.08690	5.0404	ppb	0.08690	1.72%
Ti 334.940†	11723.1	-2.6502	µg/L	0.03210	-2.6502	ppb	0.03210	1.21%
Tl 190.801†	28.9	-34.246	µg/L	10.4179	-34.246	ppb	10.4179	30.42%
U 409.014†	155309.6	14723	µg/L	31.6	14723	ppb	31.6	0.21%

QC value within limits for U 409.014 Recovery = 98.16%

V 292.402†	-3481.6	-2.7768	µg/L	0.07077	-2.7768	ppb	0.07077	2.55%
Zn 213.857†	2578.3	23.803	µg/L	0.3766	23.803	ppb	0.3766	1.58%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 1/27/2010 09:00:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77219.9	77219.9	101	%			09:01:32
1	Al 396.153Radial†	419.6	445.3	96.776	µg/L	96.776	ppb	09:01:32
1	Ca 317.933Radial†	367.4	113.9	89.668	µg/L	89.668	ppb	09:01:52
1	Fe 238.204 Radial†	-15.9	-31.7	-237.35	µg/L	-237.35	ppb	09:01:52
1	K 766.490 Radial†	474995.2	472121.5	313410	µg/L	313410	ppb	09:01:26
1	Mg 279.077 IEC†	-21.4	-29.6	-147.56	µg/L	-147.56	ppb	09:01:52
1	Na 589.592 Radial†	2011.8	1456.5	418.25	µg/L	418.25	ppb	09:01:32
1	Sr 421.552†	1634407.8	1625379.8	10328	µg/L	10328	ppb	09:01:26
1	Sc 361.383	1932740.7	1932740.7	99.452	%			09:03:24
1	Y 371.029	1211113.0	1211113.0	98.561	%			09:03:24
1	Ag 328.068†	-6924.7	-6907.8	5.5480	µg/L	5.5480	ppb	09:03:24
1	As 188.979†	4468.8	4492.8	10348	µg/L	10348	ppb	09:03:29
1	B 249.677†	105666.3	106133.6	5205.1	µg/L	5205.1	ppb	09:03:24
1	Ba 233.527†	518789.9	521663.9	15175	µg/L	15175	ppb	09:03:24
1	Be 313.107†	4336327.5	4356389.6	3031.3	µg/L	3031.3	ppb	09:03:13
1	Cd 226.502†	346507.1	348552.5	10271	µg/L	10271	ppb	09:03:24
1	Co 228.616†	184338.2	185399.2	10221	µg/L	10221	ppb	09:03:24
1	Cr 267.716†	1112692.1	1118908.0	25959	µg/L	25959	ppb	09:03:24
1	Cu 324.752†	2824056.2	2835953.9	21323	µg/L	21323	ppb	09:03:24
1	Mn 257.610†	2712988.7	2728132.0	10078	µg/L	10078	ppb	09:03:24
1	Mo 202.031†	81987.3	82422.0	10352	µg/L	10352	ppb	09:03:24
1	Ni 231.604†	164386.7	164957.3	10381	µg/L	10381	ppb	09:03:24
1	P 214.914†	7820.4	7661.0	16262	µg/L	16262	ppb	09:03:29
1	Pb 220.353†	91499.5	91947.9	26808	µg/L	26808	ppb	09:03:24
1	S 181.975 Axial†	9352.6	9378.6	53761	µg/L	53761	ppb	09:03:29
1	Sb 206.836†	9719.9	9751.1	10669	µg/L	10669	ppb	09:03:29
1	Se 196.026†	6716.8	6741.4	10649	µg/L	10649	ppb	09:03:29
1	SiO2†	491229.3	491658.2	103780	µg/L	103780	ppb	09:03:24
1	Si 251.611†	573236.5	576091.7	48321	µg/L	48321	ppb	09:03:24
1	Sn 189.927†	19764.2	19849.7	11586	µg/L	11586	ppb	09:03:29
1	Ti 334.940†	4080815.7	4102535.2	10232	µg/L	10232	ppb	09:03:13
1	Tl 190.801†	5917.8	5973.5	10387	µg/L	10387	ppb	09:03:29
1	U 409.014†	745.6	982.6	93.830	µg/L	93.830	ppb	09:03:24
1	V 292.402†	848005.0	852801.3	10744	µg/L	10744	ppb	09:03:24
1	Zn 213.857†	529589.9	531837.6	15425	µg/L	15425	ppb	09:03:24
2	Sc RADIAL	76398.3	76398.3	99.5	%			09:02:04
2	Al 396.153Radial†	383.5	413.6	75.539	µg/L	75.539	ppb	09:02:04
2	Ca 317.933Radial†	346.2	96.4	75.934	µg/L	75.934	ppb	09:02:24
2	Fe 238.204 Radial†	-16.4	-32.4	-248.97	µg/L	-248.97	ppb	09:02:24
2	K 766.490 Radial†	472333.0	474526.2	315010	µg/L	315010	ppb	09:01:58
2	Mg 279.077 IEC†	-21.2	-29.6	-149.21	µg/L	-149.21	ppb	09:02:24
2	Na 589.592 Radial†	1610.4	1074.4	308.52	µg/L	308.52	ppb	09:02:04
2	Sr 421.552†	1622831.1	1631224.0	10365	µg/L	10365	ppb	09:01:58
2	Sc 361.383	1932652.6	1932652.6	99.447	%			09:03:49
2	Y 371.029	1211672.3	1211672.3	98.606	%			09:03:49
2	Ag 328.068†	-6969.4	-6953.0	4.8123	µg/L	4.8123	ppb	09:03:49
2	As 188.979†	4439.6	4463.7	10280	µg/L	10280	ppb	09:03:54
2	B 249.677†	105498.2	105969.3	5196.9	µg/L	5196.9	ppb	09:03:49
2	Ba 233.527†	516150.9	519034.0	15099	µg/L	15099	ppb	09:03:49
2	Be 313.107†	4354175.9	4374535.7	3043.9	µg/L	3043.9	ppb	09:03:38
2	Cd 226.502†	344629.1	346679.9	10216	µg/L	10216	ppb	09:03:49
2	Co 228.616†	183217.0	184280.3	10159	µg/L	10159	ppb	09:03:49
2	Cr 267.716†	1105568.8	1111796.0	25794	µg/L	25794	ppb	09:03:49
2	Cu 324.752†	2816319.6	2828303.7	21266	µg/L	21266	ppb	09:03:49
2	Mn 257.610†	2698384.1	2713570.5	10025	µg/L	10025	ppb	09:03:49
2	Mo 202.031†	81663.2	82099.9	10312	µg/L	10312	ppb	09:03:49
2	Ni 231.604†	163487.2	164060.4	10325	µg/L	10325	ppb	09:03:49
2	P 214.914†	7772.3	7613.0	16151	µg/L	16151	ppb	09:03:54
2	Pb 220.353†	91105.9	91556.3	26694	µg/L	26694	ppb	09:03:49

2	S 181.975 Axial†	9354.5	9381.0	53775	µg/L	53775 ppb	09:03:54
2	Sb 206.836†	9672.2	9703.5	10617	µg/L	10617 ppb	09:03:54
2	Se 196.026†	6697.1	6721.9	10618	µg/L	10618 ppb	09:03:54
2	SiO2†	490288.7	490734.8	103580	µg/L	103580 ppb	09:03:49
2	Si 251.611†	571952.4	574826.6	48215	µg/L	48215 ppb	09:03:49
2	Sn 189.927†	19571.2	19656.6	11473	µg/L	11473 ppb	09:03:54
2	Ti 334.940†	4101225.6	4123245.4	10283	µg/L	10283 ppb	09:03:38
2	Tl 190.801†	5899.4	5955.3	10356	µg/L	10356 ppb	09:03:54
2	U 409.014†	736.2	973.2	92.933	µg/L	92.933 ppb	09:03:49
2	V 292.402†	844165.7	848979.5	10696	µg/L	10696 ppb	09:03:49
2	Zn 213.857†	527086.0	529344.1	15352	µg/L	15352 ppb	09:03:49
3	Sc RADIAL	76823.3	76823.3	100	%		09:02:36
3	Al 396.153Radial†	385.7	413.7	91.964	µg/L	91.964 ppb	09:02:36
3	Ca 317.933Radial†	343.4	91.7	72.187	µg/L	72.187 ppb	09:02:56
3	Fe 238.204 Radial†	-17.3	-33.2	-278.30	µg/L	-278.30 ppb	09:02:56
3	K 766.490 Radial†	473697.0	473262.4	314170	µg/L	314170 ppb	09:02:30
3	Mg 279.077 IEC†	-21.4	-29.7	-163.23	µg/L	-163.23 ppb	09:02:56
3	Na 589.592 Radial†	1436.2	891.2	255.91	µg/L	255.91 ppb	09:02:36
3	Sr 421.552†	1627729.2	1627093.9	10338	µg/L	10338 ppb	09:02:30
3	Sc 361.383	1940169.6	1940169.6	99.834	%		09:04:14
3	Y 371.029	1216195.3	1216195.3	98.974	%		09:04:14
3	Ag 328.068†	-6388.2	-6343.7	4.8969	µg/L	4.8969 ppb	09:04:14
3	As 188.979†	4100.8	4107.1	9459.0	µg/L	9459.0 ppb	09:04:19
3	B 249.677†	100480.1	100531.8	4928.4	µg/L	4928.4 ppb	09:04:14
3	Ba 233.527†	481468.6	482283.2	14029	µg/L	14029 ppb	09:04:14
3	Be 313.107†	4142672.2	4145717.2	2884.7	µg/L	2884.7 ppb	09:04:03
3	Cd 226.502†	321083.6	321752.6	9481.0	µg/L	9481.0 ppb	09:04:14
3	Co 228.616†	169271.1	169597.5	9348.8	µg/L	9348.8 ppb	09:04:14
3	Cr 267.716†	1003727.1	1005477.9	23328	µg/L	23328 ppb	09:04:14
3	Cu 324.752†	2606280.0	2606943.0	19601	µg/L	19601 ppb	09:04:14
3	Mn 257.610†	2495691.5	2500028.4	9235.7	µg/L	9235.7 ppb	09:04:14
3	Mo 202.031†	75653.2	75761.8	9515.8	µg/L	9515.8 ppb	09:04:14
3	Ni 231.604†	151028.3	150943.8	9499.2	µg/L	9499.2 ppb	09:04:14
3	P 214.914†	7078.4	6887.7	14573	µg/L	14573 ppb	09:04:19
3	Pb 220.353†	85783.7	85870.4	25036	µg/L	25036 ppb	09:04:14
3	S 181.975 Axial†	8675.5	8664.4	49667	µg/L	49667 ppb	09:04:19
3	Sb 206.836†	8858.1	8850.4	9687.8	µg/L	9687.8 ppb	09:04:19
3	Se 196.026†	6223.8	6221.7	9827.8	µg/L	9827.8 ppb	09:04:19
3	SiO2†	463164.4	461655.3	97443	µg/L	97443 ppb	09:04:14
3	Si 251.611†	540248.9	540842.2	45364	µg/L	45364 ppb	09:04:14
3	Sn 189.927†	17569.4	17575.1	10258	µg/L	10258 ppb	09:04:19
3	Ti 334.940†	3907150.0	3912869.3	9758.6	µg/L	9758.6 ppb	09:04:03
3	Tl 190.801†	5585.6	5618.0	9769.8	µg/L	9769.8 ppb	09:04:19
3	U 409.014†	640.2	874.2	83.485	µg/L	83.485 ppb	09:04:14
3	V 292.402†	779373.3	780790.6	9836.2	µg/L	9836.2 ppb	09:04:14
3	Zn 213.857†	489213.5	489355.2	14193	µg/L	14193 ppb	09:04:14

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1935187.6	99.578	%	0.2220				0.22%
Sc RADIAL	76813.8	100.0	%	0.53				0.53%
Y 371.029	1212993.5	98.714	%	0.2268				0.23%
Ag 328.068†	-6734.9	5.0857	µg/L	0.40256	5.0857	ppb	0.40256	7.92%
Al 396.153Radial†	424.2	88.093	µg/L	11.1350	88.093	ppb	11.1350	12.64%
As 188.979†	4354.5	10029	µg/L	494.8	10029	ppb	494.8	4.93%
QC value within limits for As 188.979 Recovery = 100.29%								
B 249.677†	104211.6	5110.1	µg/L	157.44	5110.1	ppb	157.44	3.08%
QC value within limits for B 249.677 Recovery = 102.20%								
Ba 233.527†	507660.4	14768	µg/L	640.6	14768	ppb	640.6	4.34%
QC value within limits for Ba 233.527 Recovery = 98.45%								
Be 313.107†	4292214.2	2986.6	µg/L	88.51	2986.6	ppb	88.51	2.96%
QC value within limits for Be 313.107 Recovery = 99.55%								
Ca 317.933Radial†	100.7	79.263	µg/L	9.2039	79.263	ppb	9.2039	11.61%
Cd 226.502†	338995.0	9989.1	µg/L	440.92	9989.1	ppb	440.92	4.41%
QC value within limits for Cd 226.502 Recovery = 99.89%								
Co 228.616†	179759.0	9909.4	µg/L	486.52	9909.4	ppb	486.52	4.91%
QC value within limits for Co 228.616 Recovery = 99.09%								
Cr 267.716†	1078727.3	25027	µg/L	1474.0	25027	ppb	1474.0	5.89%
QC value within limits for Cr 267.716 Recovery = 100.11%								

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Cu 324.752†          2757066.9       20730 µg/L        978.0       20730 ppb        978.0   4.72%
   QC value within limits for Cu 324.752  Recovery = 103.65%
Fe 238.204 Radial†       -32.4     -254.88 µg/L       21.106     -254.88 ppb       21.106   8.28%
K 766.490 Radial†     473303.4      314200 µg/L        798.5      314200 ppb        798.5   0.25%
   QC value within limits for K 766.490 Radial  Recovery = 104.73%
Mg 279.077 IEC†          -29.6     -153.33 µg/L        8.613    -153.33 ppb        8.613   5.62%
Mn 257.610†          2647243.6      9779.5 µg/L       471.76      9779.5 ppb       471.76   4.82%
   QC value within limits for Mn 257.610  Recovery = 97.80%
Mo 202.031†            80094.5       10060 µg/L        471.7       10060 ppb        471.7   4.69%
   QC value within limits for Mo 202.031  Recovery = 100.60%
Na 589.592 Radial†      1140.7      327.56 µg/L       82.827      327.56 ppb       82.827  25.29%
Ni 231.604†           159987.2       10068 µg/L        493.7       10068 ppb        493.7   4.90%
   QC value within limits for Ni 231.604  Recovery = 100.68%
P 214.914†              7387.2       15662 µg/L        945.0       15662 ppb        945.0   6.03%
   QC value within limits for P 214.914  Recovery = 104.41%
Pb 220.353†            89791.5       26179 µg/L        991.7       26179 ppb        991.7   3.79%
   QC value within limits for Pb 220.353  Recovery = 104.72%
S 181.975 Axial†        9141.3       52401 µg/L       2367.5       52401 ppb       2367.5   4.52%
   QC value within limits for S 181.975 Axial  Recovery = 104.80%
Sb 206.836†             9435.0       10325 µg/L        552.0       10325 ppb        552.0   5.35%
   QC value within limits for Sb 206.836  Recovery = 103.25%
Se 196.026†             6561.7       10365 µg/L        465.4       10365 ppb        465.4   4.49%
   QC value within limits for Se 196.026  Recovery = 103.65%
SiO2†                 481349.4      101600 µg/L       3601.3      101600 ppb       3601.3   3.54%
   QC value within limits for SiO2  Recovery = 94.95%
Si 251.611†           563920.2       47300 µg/L       1677.2       47300 ppb       1677.2   3.55%
   QC value within limits for Si 251.611  Recovery = 94.60%
Sn 189.927†            19027.2       11106 µg/L        736.1       11106 ppb        736.1   6.63%
   QC value greater than the upper limit for Sn 189.927  Recovery = 111.06%
Sr 421.552†          1627899.2       10344 µg/L         19.1       10344 ppb         19.1   0.18%
   QC value within limits for Sr 421.552  Recovery = 103.44%
Ti 334.940†          4046216.6       10091 µg/L        289.2       10091 ppb        289.2   2.87%
   QC value within limits for Ti 334.940  Recovery = 100.91%
Tl 190.801†             5848.9       10171 µg/L        347.7       10171 ppb        347.7   3.42%
   QC value within limits for Tl 190.801  Recovery = 101.71%
U 409.014†               943.4      90.082 µg/L       5.7313      90.082 ppb       5.7313   6.36%
V 292.402†            827523.8       10425 µg/L        510.9       10425 ppb        510.9   4.90%
   QC value within limits for V 292.402  Recovery = 104.25%
Zn 213.857†           516845.6       14990 µg/L        691.3       14990 ppb        691.3   4.61%
   QC value within limits for Zn 213.857  Recovery = 99.93%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 09:04:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78693.9	78693.9	102	%			09:05:08
1	Al 396.153Radial†	7715.7	7559.9	5242.0	µg/L	5242.0	ppb	09:05:08
1	Ca 317.933Radial†	6994.7	6576.4	5178.4	µg/L	5178.4	ppb	09:05:28
1	Fe 238.204 Radial†	391.7	366.5	5272.7	µg/L	5272.7	ppb	09:05:28
1	K 766.490 Radial†	8529.6	7914.4	5253.9	µg/L	5253.9	ppb	09:05:08
1	Mg 279.077 IEC†	506.3	485.9	5299.1	µg/L	5299.1	ppb	09:05:28
1	Na 589.592 Radial†	37583.6	36143.5	10379	µg/L	10379	ppb	09:05:08
1	Sr 421.552†	83694.1	81143.1	515.58	µg/L	515.58	ppb	09:05:08
1	Sc 361.383	1956250.0	1956250.0	100.66	%			09:06:32
1	Y 371.029	1234151.7	1234151.7	100.44	%			09:06:32
1	Ag 328.068†	57118.7	56798.4	533.32	µg/L	533.32	ppb	09:06:37
1	As 188.979†	240.3	238.2	548.69	µg/L	548.69	ppb	09:06:58
1	B 249.677†	11208.7	11019.8	534.23	µg/L	534.23	ppb	09:06:37
1	Ba 233.527†	18536.7	18429.4	536.40	µg/L	536.40	ppb	09:06:37
1	Be 313.107†	762448.7	753598.6	524.84	µg/L	524.84	ppb	09:06:32
1	Cd 226.502†	18254.0	18269.5	537.74	µg/L	537.74	ppb	09:06:37
1	Co 228.616†	9754.4	9735.3	536.71	µg/L	536.71	ppb	09:06:37
1	Cr 267.716†	23332.8	23262.2	539.89	µg/L	539.89	ppb	09:06:37
1	Cu 324.752†	75951.0	71783.6	540.46	µg/L	540.46	ppb	09:06:37
1	Mn 257.610†	143269.3	142517.2	526.98	µg/L	526.98	ppb	09:06:37
1	Mo 202.031†	4304.9	4259.4	535.18	µg/L	535.18	ppb	09:06:58
1	Ni 231.604†	8936.5	8542.3	537.64	µg/L	537.64	ppb	09:06:37
1	P 214.914†	1336.6	1125.4	2642.7	µg/L	2642.7	ppb	09:06:58
1	Pb 220.353†	1950.8	1882.0	549.00	µg/L	549.00	ppb	09:06:58
1	S 181.975 Axial†	206.7	179.8	1030.7	µg/L	1030.7	ppb	09:06:58
1	Sb 206.836†	528.0	502.2	558.15	µg/L	558.15	ppb	09:06:58
1	Se 196.026†	349.1	334.3	547.47	µg/L	547.47	ppb	09:06:58
1	SiO2†	29873.8	27398.7	5783.1	µg/L	5783.1	ppb	09:06:37
1	Si 251.611†	32745.1	32225.4	2703.0	µg/L	2703.0	ppb	09:06:37
1	Sn 189.927†	976.8	947.0	555.37	µg/L	555.37	ppb	09:06:58
1	Ti 334.940†	212957.9	210784.7	525.36	µg/L	525.36	ppb	09:06:32
1	Tl 190.801†	286.2	307.4	534.02	µg/L	534.02	ppb	09:06:58
1	U 409.014†	5430.7	5627.9	536.02	µg/L	536.02	ppb	09:06:37
1	V 292.402†	43322.0	43159.4	542.89	µg/L	542.89	ppb	09:06:37
1	Zn 213.857†	19328.4	18530.1	536.42	µg/L	536.42	ppb	09:06:37
2	Sc RADIAL	78628.4	78628.4	102	%			09:05:34
2	Al 396.153Radial†	7730.9	7581.0	5256.7	µg/L	5256.7	ppb	09:05:34
2	Ca 317.933Radial†	7000.4	6587.7	5187.3	µg/L	5187.3	ppb	09:05:54
2	Fe 238.204 Radial†	390.1	365.2	5254.9	µg/L	5254.9	ppb	09:05:54
2	K 766.490 Radial†	8477.0	7870.0	5224.4	µg/L	5224.4	ppb	09:05:34
2	Mg 279.077 IEC†	507.6	487.7	5318.2	µg/L	5318.2	ppb	09:05:54
2	Na 589.592 Radial†	37631.9	36221.3	10401	µg/L	10401	ppb	09:05:34
2	Sr 421.552†	83781.9	81296.9	516.55	µg/L	516.55	ppb	09:05:34
2	Sc 361.383	1951423.4	1951423.4	100.41	%			09:07:05
2	Y 371.029	1230214.9	1230214.9	100.12	%			09:07:05
2	Ag 328.068†	56712.4	56534.1	530.84	µg/L	530.84	ppb	09:07:10
2	As 188.979†	243.2	241.6	556.56	µg/L	556.56	ppb	09:07:31
2	B 249.677†	11077.9	10917.1	529.24	µg/L	529.24	ppb	09:07:10
2	Ba 233.527†	18368.2	18307.1	532.84	µg/L	532.84	ppb	09:07:10
2	Be 313.107†	757466.2	750510.0	522.69	µg/L	522.69	ppb	09:07:05
2	Cd 226.502†	18085.8	18146.8	534.13	µg/L	534.13	ppb	09:07:10
2	Co 228.616†	9682.5	9687.6	534.08	µg/L	534.08	ppb	09:07:10
2	Cr 267.716†	23195.8	23183.1	538.06	µg/L	538.06	ppb	09:07:10
2	Cu 324.752†	75280.8	71302.8	536.84	µg/L	536.84	ppb	09:07:10
2	Mn 257.610†	141996.2	141601.4	523.59	µg/L	523.59	ppb	09:07:10
2	Mo 202.031†	4296.0	4261.2	535.41	µg/L	535.41	ppb	09:07:31
2	Ni 231.604†	8866.7	8494.8	534.65	µg/L	534.65	ppb	09:07:10
2	P 214.914†	1346.1	1138.0	2673.4	µg/L	2673.4	ppb	09:07:31
2	Pb 220.353†	1933.0	1869.1	545.25	µg/L	545.25	ppb	09:07:31

2	S 181.975 Axial†	210.6	184.2	1056.0 µg/L	1056.0 ppb	09:07:31
2	Sb 206.836†	518.0	493.5	548.51 µg/L	548.51 ppb	09:07:31
2	Se 196.026†	357.9	344.0	562.70 µg/L	562.70 ppb	09:07:31
2	SiO2†	29628.3	27227.6	5747.0 µg/L	5747.0 ppb	09:07:10
2	Si 251.611†	32387.4	31949.6	2679.8 µg/L	2679.8 ppb	09:07:10
2	Sn 189.927†	971.8	944.4	553.86 µg/L	553.86 ppb	09:07:31
2	Ti 334.940†	211657.4	210012.8	523.43 µg/L	523.43 ppb	09:07:05
2	Tl 190.801†	293.8	315.7	548.37 µg/L	548.37 ppb	09:07:31
2	U 409.014†	5307.2	5518.4	525.56 µg/L	525.56 ppb	09:07:10
2	V 292.402†	43008.7	42953.9	540.32 µg/L	540.32 ppb	09:07:10
2	Zn 213.857†	19115.6	18365.6	531.64 µg/L	531.64 ppb	09:07:10
3	Sc RADIAL	78334.2	78334.2	102 %		09:06:00
3	Al 396.153Radial†	7682.2	7561.6	5244.5 µg/L	5244.5 ppb	09:06:00
3	Ca 317.933Radial†	6952.7	6566.6	5170.7 µg/L	5170.7 ppb	09:06:20
3	Fe 238.204 Radial†	390.7	367.2	5283.2 µg/L	5283.2 ppb	09:06:20
3	K 766.490 Radial†	8491.9	7915.7	5254.7 µg/L	5254.7 ppb	09:06:00
3	Mg 279.077 IEC†	506.8	488.6	5327.8 µg/L	5327.8 ppb	09:06:20
3	Na 589.592 Radial†	37376.2	36108.6	10369 µg/L	10369 ppb	09:06:00
3	Sr 421.552†	83228.1	81061.3	515.06 µg/L	515.06 ppb	09:06:00
3	Sc 361.383	1954344.2	1954344.2	100.56 %		09:07:37
3	Y 371.029	1232547.2	1232547.2	100.31 %		09:07:37
3	Ag 328.068†	55522.7	55266.7	518.85 µg/L	518.85 ppb	09:07:43
3	As 188.979†	222.0	220.2	507.20 µg/L	507.20 ppb	09:08:04
3	B 249.677†	10778.7	10603.1	513.89 µg/L	513.89 ppb	09:07:43
3	Ba 233.527†	17676.3	17591.8	512.01 µg/L	512.01 ppb	09:07:43
3	Be 313.107†	742066.5	734069.2	511.24 µg/L	511.24 ppb	09:07:37
3	Cd 226.502†	17397.3	17435.3	513.16 µg/L	513.16 ppb	09:07:43
3	Co 228.616†	9218.3	9211.6	507.78 µg/L	507.78 ppb	09:07:43
3	Cr 267.716†	21764.3	21725.2	504.22 µg/L	504.22 ppb	09:07:43
3	Cu 324.752†	72344.7	68271.1	514.05 µg/L	514.05 ppb	09:07:43
3	Mn 257.610†	135691.0	135120.2	499.65 µg/L	499.65 ppb	09:07:43
3	Mo 202.031†	3798.1	3759.6	472.41 µg/L	472.41 ppb	09:08:04
3	Ni 231.604†	8509.9	8126.8	511.50 µg/L	511.50 ppb	09:07:43
3	P 214.914†	1230.0	1020.6	2393.7 µg/L	2393.7 ppb	09:08:04
3	Pb 220.353†	1759.6	1693.8	494.03 µg/L	494.03 ppb	09:08:04
3	S 181.975 Axial†	198.0	171.4	982.52 µg/L	982.52 ppb	09:08:04
3	Sb 206.836†	471.8	446.8	496.20 µg/L	496.20 ppb	09:08:04
3	Se 196.026†	327.5	313.3	514.22 µg/L	514.22 ppb	09:08:04
3	SiO2†	28770.9	26330.9	5557.7 µg/L	5557.7 ppb	09:07:43
3	Si 251.611†	31354.5	30874.3	2589.6 µg/L	2589.6 ppb	09:07:43
3	Sn 189.927†	851.6	823.4	483.25 µg/L	483.25 ppb	09:08:04
3	Ti 334.940†	206881.9	204949.1	510.80 µg/L	510.80 ppb	09:07:37
3	Tl 190.801†	273.7	295.2	512.95 µg/L	512.95 ppb	09:08:04
3	U 409.014†	4988.0	5193.1	494.52 µg/L	494.52 ppb	09:07:43
3	V 292.402†	40921.7	40814.5	513.12 µg/L	513.12 ppb	09:07:43
3	Zn 213.857†	18329.0	17555.0	508.14 µg/L	508.14 ppb	09:07:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1954005.9	100.55	%	0.125				0.12%
Sc RADIAL	78552.2	102	%	0.2				0.24%
Y 371.029	1232304.6	100.29	%	0.161				0.16%
Ag 328.068†	56199.8	527.67	µg/L	7.738	527.67	ppb	7.738	1.47%
QC value within limits for Ag 328.068 Recovery = 105.53%								
Al 396.153Radial†	7567.5	5247.7	µg/L	7.86	5247.7	ppb	7.86	0.15%
QC value within limits for Al 396.153Radial Recovery = 104.95%								
As 188.979†	233.3	537.49	µg/L	26.520	537.49	ppb	26.520	4.93%
QC value within limits for As 188.979 Recovery = 107.50%								
B 249.677†	10846.7	525.79	µg/L	10.597	525.79	ppb	10.597	2.02%
QC value within limits for B 249.677 Recovery = 105.16%								
Ba 233.527†	18109.4	527.09	µg/L	13.175	527.09	ppb	13.175	2.50%
QC value within limits for Ba 233.527 Recovery = 105.42%								
Be 313.107†	746059.2	519.59	µg/L	7.311	519.59	ppb	7.311	1.41%
QC value within limits for Be 313.107 Recovery = 103.92%								
Ca 317.933Radial†	6576.9	5178.8	µg/L	8.30	5178.8	ppb	8.30	0.16%
QC value within limits for Ca 317.933Radial Recovery = 103.58%								
Cd 226.502†	17950.5	528.34	µg/L	13.275	528.34	ppb	13.275	2.51%
QC value within limits for Cd 226.502 Recovery = 105.67%								
Co 228.616†	9544.9	526.19	µg/L	15.998	526.19	ppb	15.998	3.04%

QC value within limits for Co 228.616 Recovery = 105.24%

Cr 267.716†	22723.5	527.39 µg/L	20.084	527.39 ppb	20.084	3.81%

QC value within limits for Cr 267.716 Recovery = 105.48%

Cu 324.752†	70452.5	530.45 µg/L	14.318	530.45 ppb	14.318	2.70%

QC value within limits for Cu 324.752 Recovery = 106.09%

Fe 238.204 Radial†	366.3	5270.3 µg/L	14.30	5270.3 ppb	14.30	0.27%

QC value within limits for Fe 238.204 Radial Recovery = 105.41%

K 766.490 Radial†	7900.1	5244.3 µg/L	17.29	5244.3 ppb	17.29	0.33%

QC value within limits for K 766.490 Radial Recovery = 104.89%

Mg 279.077 IEC†	487.4	5315.0 µg/L	14.63	5315.0 ppb	14.63	0.28%

QC value within limits for Mg 279.077 IEC Recovery = 106.30%

Mn 257.610†	139746.3	516.74 µg/L	14.896	516.74 ppb	14.896	2.88%

QC value within limits for Mn 257.610 Recovery = 103.35%

Mo 202.031†	4093.4	514.33 µg/L	36.307	514.33 ppb	36.307	7.06%

QC value within limits for Mo 202.031 Recovery = 102.87%

Na 589.592 Radial†	36157.8	10383 µg/L	16.6	10383 ppb	16.6	0.16%

QC value within limits for Na 589.592 Radial Recovery = 103.83%

Ni 231.604†	8388.0	527.93 µg/L	14.311	527.93 ppb	14.311	2.71%

QC value within limits for Ni 231.604 Recovery = 105.59%

P 214.914†	1094.7	2569.9 µg/L	153.41	2569.9 ppb	153.41	5.97%

QC value within limits for P 214.914 Recovery = 102.80%

Pb 220.353†	1815.0	529.43 µg/L	30.711	529.43 ppb	30.711	5.80%

QC value within limits for Pb 220.353 Recovery = 105.89%

S 181.975 Axial†	178.5	1023.1 µg/L	37.34	1023.1 ppb	37.34	3.65%

QC value within limits for S 181.975 Axial Recovery = 102.31%

Sb 206.836†	480.8	534.29 µg/L	33.337	534.29 ppb	33.337	6.24%

QC value within limits for Sb 206.836 Recovery = 106.86%

Se 196.026†	330.5	541.46 µg/L	24.795	541.46 ppb	24.795	4.58%

QC value within limits for Se 196.026 Recovery = 108.29%

SiO2†	26985.7	5696.0 µg/L	121.05	5696.0 ppb	121.05	2.13%

QC value within limits for SiO2 Recovery = 106.52%

Si 251.611†	31683.1	2657.5 µg/L	59.88	2657.5 ppb	59.88	2.25%

QC value within limits for Si 251.611 Recovery = 106.30%

Sn 189.927†	904.9	530.83 µg/L	41.209	530.83 ppb	41.209	7.76%

QC value within limits for Sn 189.927 Recovery = 106.17%

Sr 421.552†	81167.1	515.73 µg/L	0.760	515.73 ppb	0.760	0.15%

QC value within limits for Sr 421.552 Recovery = 103.15%

Ti 334.940†	208582.2	519.86 µg/L	7.907	519.86 ppb	7.907	1.52%

QC value within limits for Ti 334.940 Recovery = 103.97%

Tl 190.801†	306.1	531.78 µg/L	17.814	531.78 ppb	17.814	3.35%

QC value within limits for Tl 190.801 Recovery = 106.36%

U 409.014†	5446.5	518.70 µg/L	21.585	518.70 ppb	21.585	4.16%

QC value within limits for U 409.014 Recovery = 103.74%

V 292.402†	42309.3	532.11 µg/L	16.495	532.11 ppb	16.495	3.10%

QC value within limits for V 292.402 Recovery = 106.42%

Zn 213.857†	18150.2	525.40 µg/L	15.134	525.40 ppb	15.134	2.88%

QC value within limits for Zn 213.857 Recovery = 105.08%

All analyte(s) passed QC.

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 09:08:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76637.5	76637.5	99.8	%			09:08:46
1	Al 396.153Radial†	40.0	68.1	47.288	µg/L	47.288	ppb	09:08:46
1	Ca 317.933Radial†	296.6	45.7	35.952	µg/L	35.952	ppb	09:09:07
1	Fe 238.204 Radial†	20.8	5.0	71.322	µg/L	71.322	ppb	09:09:07
1	K 766.490 Radial†	543.6	132.9	88.238	µg/L	88.238	ppb	09:08:46
1	Mg 279.077 IEC†	13.6	5.3	57.684	µg/L	57.684	ppb	09:09:07
1	Na 589.592 Radial†	797.0	253.9	72.924	µg/L	72.924	ppb	09:08:46
1	Sr 421.552†	584.1	27.8	0.1765	µg/L	0.1765	ppb	09:08:46
1	Sc 361.383	1951790.1	1951790.1	100.43	%			09:10:09
1	Y 371.029	1235152.2	1235152.2	100.52	%			09:10:09
1	Ag 328.068†	2.1	57.2	0.5382	µg/L	0.5382	ppb	09:10:14
1	As 188.979†	1.0	0.4	0.9179	µg/L	0.9179	ppb	09:10:35
1	B 249.677†	203.4	87.4	4.2139	µg/L	4.2139	ppb	09:10:35
1	Ba 233.527†	-1.1	13.4	0.3894	µg/L	0.3894	ppb	09:10:35
1	Be 313.107†	4022.6	165.9	0.1154	µg/L	0.1154	ppb	09:10:14
1	Cd 226.502†	-121.0	14.9	0.4322	µg/L	0.4322	ppb	09:10:35
1	Co 228.616†	-45.4	-0.2	-0.0123	µg/L	-0.0123	ppb	09:10:35
1	Cr 267.716†	-49.4	33.6	0.7799	µg/L	0.7799	ppb	09:10:14
1	Cu 324.752†	4520.1	832.4	6.2687	µg/L	6.2687	ppb	09:10:14
1	Mn 257.610†	-141.1	49.0	0.1881	µg/L	0.1881	ppb	09:10:35
1	Mo 202.031†	27.9	10.6	1.3290	µg/L	1.3290	ppb	09:10:35
1	Ni 231.604†	347.8	10.9	0.6862	µg/L	0.6862	ppb	09:10:35
1	P 214.914†	210.4	7.0	16.223	µg/L	16.223	ppb	09:10:35
1	Pb 220.353†	69.9	13.7	3.9800	µg/L	3.9800	ppb	09:10:35
1	S 181.975 Axial†	26.7	1.1	6.3957	µg/L	6.3957	ppb	09:10:35
1	Sb 206.836†	28.2	5.7	6.3439	µg/L	6.3439	ppb	09:10:35
1	Se 196.026†	7.9	-4.6	-6.9660	µg/L	-6.9660	ppb	09:10:35
1	SiO2†	2325.4	36.7	7.7402	µg/L	7.7402	ppb	09:10:14
1	Si 251.611†	356.6	50.6	4.2432	µg/L	4.2432	ppb	09:10:35
1	Sn 189.927†	31.3	7.8	4.5551	µg/L	4.5551	ppb	09:10:35
1	Ti 334.940†	1007.9	229.9	0.5693	µg/L	0.5693	ppb	09:10:14
1	Tl 190.801†	-21.7	1.5	2.5594	µg/L	2.5594	ppb	09:10:35
1	U 409.014†	-254.4	-20.4	-1.9556	µg/L	-1.9556	ppb	09:10:14
1	V 292.402†	-114.8	7.9	0.1114	µg/L	0.1114	ppb	09:10:14
1	Zn 213.857†	734.5	60.0	1.7298	µg/L	1.7298	ppb	09:10:35
2	Sc RADIAL	76515.4	76515.4	99.6	%			09:09:12
2	Al 396.153Radial†	37.5	65.6	45.585	µg/L	45.585	ppb	09:09:12
2	Ca 317.933Radial†	303.2	52.8	41.567	µg/L	41.567	ppb	09:09:33
2	Fe 238.204 Radial†	18.3	2.5	35.821	µg/L	35.821	ppb	09:09:33
2	K 766.490 Radial†	523.6	113.7	75.473	µg/L	75.473	ppb	09:09:12
2	Mg 279.077 IEC†	16.9	8.6	94.168	µg/L	94.168	ppb	09:09:33
2	Na 589.592 Radial†	769.7	227.8	65.422	µg/L	65.422	ppb	09:09:12
2	Sr 421.552†	610.6	55.4	0.3517	µg/L	0.3517	ppb	09:09:12
2	Sc 361.383	1950300.8	1950300.8	100.36	%			09:10:41
2	Y 371.029	1233736.8	1233736.8	100.40	%			09:10:41
2	Ag 328.068†	13.7	68.8	0.6471	µg/L	0.6471	ppb	09:10:46
2	As 188.979†	2.2	1.6	3.7077	µg/L	3.7077	ppb	09:11:07
2	B 249.677†	202.1	86.2	4.1762	µg/L	4.1762	ppb	09:11:07
2	Ba 233.527†	-0.8	13.7	0.3989	µg/L	0.3989	ppb	09:11:07
2	Be 313.107†	4013.9	160.2	0.1114	µg/L	0.1114	ppb	09:10:46
2	Cd 226.502†	-123.8	12.1	0.3519	µg/L	0.3519	ppb	09:11:07
2	Co 228.616†	-39.1	6.0	0.3338	µg/L	0.3338	ppb	09:11:07
2	Cr 267.716†	-81.3	1.8	0.0410	µg/L	0.0410	ppb	09:10:46
2	Cu 324.752†	4512.8	828.6	6.2349	µg/L	6.2349	ppb	09:10:46
2	Mn 257.610†	-135.3	54.7	0.2031	µg/L	0.2031	ppb	09:11:07
2	Mo 202.031†	27.4	10.1	1.2680	µg/L	1.2680	ppb	09:11:07
2	Ni 231.604†	349.8	13.1	0.8265	µg/L	0.8265	ppb	09:11:07
2	P 214.914†	209.3	6.1	13.870	µg/L	13.870	ppb	09:11:07
2	Pb 220.353†	62.7	6.5	1.8977	µg/L	1.8977	ppb	09:11:07

2	S 181.975 Axial†	23.1	-2.5	-14.555 µg/L	-14.555 ppb	09:11:07
2	Sb 206.836†	28.7	6.2	6.9314 µg/L	6.9314 ppb	09:11:07
2	Se 196.026†	8.2	-4.3	-6.6826 µg/L	-6.6826 ppb	09:11:07
2	SiO2†	2341.5	54.4	11.492 µg/L	11.492 ppb	09:10:46
2	Si 251.611†	373.7	67.8	5.6907 µg/L	5.6907 ppb	09:11:07
2	Sn 189.927†	27.7	4.2	2.4904 µg/L	2.4904 ppb	09:11:07
2	Ti 334.940†	993.1	215.9	0.5318 µg/L	0.5318 ppb	09:10:46
2	Tl 190.801†	-15.5	7.7	13.199 µg/L	13.199 ppb	09:11:07
2	U 409.014†	-306.1	-72.0	-6.8813 µg/L	-6.8813 ppb	09:10:46
2	V 292.402†	-76.1	46.3	0.5804 µg/L	0.5804 ppb	09:10:46
2	Zn 213.857†	740.7	66.8	1.9263 µg/L	1.9263 ppb	09:11:07
3	Sc RADIAL	76796.8	76796.8	100.0 %		09:09:38
3	Al 396.153Radial†	26.4	54.3	37.762 µg/L	37.762 ppb	09:09:38
3	Ca 317.933Radial†	308.6	57.1	44.937 µg/L	44.937 ppb	09:09:59
3	Fe 238.204 Radial†	19.7	3.8	55.046 µg/L	55.046 ppb	09:09:59
3	K 766.490 Radial†	539.9	128.1	85.040 µg/L	85.040 ppb	09:09:38
3	Mg 279.077 IEC†	14.4	6.1	66.442 µg/L	66.442 ppb	09:09:59
3	Na 589.592 Radial†	735.8	191.1	54.881 µg/L	54.881 ppb	09:09:38
3	Sr 421.552†	560.3	2.8	0.0178 µg/L	0.0178 ppb	09:09:38
3	Sc 361.383	1944171.2	1944171.2	100.04 %		09:11:13
3	Y 371.029	1230417.2	1230417.2	100.13 %		09:11:13
3	Ag 328.068†	-32.5	22.6	0.2158 µg/L	0.2158 ppb	09:11:18
3	As 188.979†	1.5	1.0	2.2759 µg/L	2.2759 ppb	09:11:39
3	B 249.677†	201.2	86.0	4.1542 µg/L	4.1542 ppb	09:11:39
3	Ba 233.527†	-4.7	9.8	0.2865 µg/L	0.2865 ppb	09:11:39
3	Be 313.107†	3952.3	111.3	0.0773 µg/L	0.0773 ppb	09:11:18
3	Cd 226.502†	-129.3	6.2	0.1773 µg/L	0.1773 ppb	09:11:39
3	Co 228.616†	-34.7	10.3	0.5699 µg/L	0.5699 ppb	09:11:39
3	Cr 267.716†	-56.3	26.5	0.6144 µg/L	0.6144 ppb	09:11:18
3	Cu 324.752†	4496.9	826.8	6.2246 µg/L	6.2246 ppb	09:11:18
3	Mn 257.610†	-135.3	54.3	0.2051 µg/L	0.2051 ppb	09:11:39
3	Mo 202.031†	16.8	-0.4	-0.0510 µg/L	-0.0510 ppb	09:11:39
3	Ni 231.604†	349.6	14.0	0.8851 µg/L	0.8851 ppb	09:11:39
3	P 214.914†	208.0	5.4	12.243 µg/L	12.243 ppb	09:11:39
3	Pb 220.353†	62.8	6.8	1.9727 µg/L	1.9727 ppb	09:11:39
3	S 181.975 Axial†	26.3	0.8	4.4048 µg/L	4.4048 ppb	09:11:39
3	Sb 206.836†	24.6	2.2	2.4546 µg/L	2.4546 ppb	09:11:39
3	Se 196.026†	7.8	-4.6	-7.0764 µg/L	-7.0764 ppb	09:11:39
3	SiO2†	2330.6	50.9	10.741 µg/L	10.741 ppb	09:11:18
3	Si 251.611†	359.9	55.2	4.6305 µg/L	4.6305 ppb	09:11:39
3	Sn 189.927†	26.2	2.8	1.6375 µg/L	1.6375 ppb	09:11:39
3	Ti 334.940†	968.8	194.7	0.4811 µg/L	0.4811 ppb	09:11:18
3	Tl 190.801†	-23.6	-0.6	-0.9631 µg/L	-0.9631 ppb	09:11:39
3	U 409.014†	-195.0	38.1	3.6229 µg/L	3.6229 ppb	09:11:18
3	V 292.402†	-104.5	17.7	0.2278 µg/L	0.2278 ppb	09:11:18
3	Zn 213.857†	726.1	54.5	1.5683 µg/L	1.5683 ppb	09:11:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1948754.0	100.28	%	0.208				0.21%
Sc RADIAL	76649.9	99.8	%	0.18				0.18%
Y 371.029	1233102.0	100.35	%	0.198				0.20%
Ag 328.068†	49.5	0.4671	µg/L	0.22427	0.4671	ppb	0.22427	48.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	62.7	43.545	µg/L	5.0804	43.545	ppb	5.0804	11.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.0	2.3005	µg/L	1.39510	2.3005	ppb	1.39510	60.64%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	86.5	4.1814	µg/L	0.03018	4.1814	ppb	0.03018	0.72%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.3	0.3583	µg/L	0.06229	0.3583	ppb	0.06229	17.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	145.8	0.1014	µg/L	0.02091	0.1014	ppb	0.02091	20.62%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	51.8	40.819	µg/L	4.5392	40.819	ppb	4.5392	11.12%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	11.1	0.3205	µg/L	0.13033	0.3205	ppb	0.13033	40.67%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	5.4	0.2971	µg/L	0.29283	0.2971	ppb	0.29283	98.56%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              20.6      0.4785 µg/L       0.38776      0.4785 ppb        0.38776  81.04%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             829.3      6.2427 µg/L       0.02305      6.2427 ppb        0.02305   0.37%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        3.8      54.063 µg/L       17.7709      54.063 ppb        17.7709  32.87%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       124.9      82.917 µg/L        6.6424      82.917 ppb         6.6424   8.01%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           6.7      72.765 µg/L       19.0462      72.765 ppb        19.0462  26.18%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              52.6      0.1988 µg/L       0.00927      0.1988 ppb        0.00927   4.66%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               6.7      0.8487 µg/L       0.77971      0.8487 ppb        0.77971  91.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      224.3      64.409 µg/L        9.0643      64.409 ppb         9.0643  14.07%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              12.7      0.7992 µg/L       0.10221      0.7992 ppb        0.10221  12.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                6.2      14.112 µg/L        2.0010      14.112 ppb         2.0010  14.18%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               9.0      2.6168 µg/L       1.18120      2.6168 ppb        1.18120  45.14%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.2     -1.2513 µg/L      11.56387     -1.2513 ppb       11.56387 924.12%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.7      5.2433 µg/L       2.43288      5.2433 ppb        2.43288  46.40%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -4.5     -6.9084 µg/L       0.20313     -6.9084 ppb        0.20313   2.94%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    47.3      9.9912 µg/L       1.98529      9.9912 ppb        1.98529  19.87%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              57.9      4.8548 µg/L       0.74938      4.8548 ppb        0.74938  15.44%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.9      2.8943 µg/L       1.50015      2.8943 ppb        1.50015  51.83%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              28.6      0.1820 µg/L       0.16704      0.1820 ppb        0.16704  91.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             213.5      0.5274 µg/L       0.04430      0.5274 ppb        0.04430   8.40%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.9      4.9318 µg/L       7.37311      4.9318 ppb        7.37311 149.50%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -18.1     -1.7380 µg/L       5.25551     -1.7380 ppb        5.25551 302.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               24.0      0.3065 µg/L       0.24422      0.3065 ppb        0.24422  79.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              60.4      1.7414 µg/L       0.17927      1.7414 ppb        0.17927  10.29%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Analysis Begun

Start Time: 1/27/2010 09:16:48 **Plasma On Time:** 1/25/2010 05:31:26
Logged In Analyst: optima **Technique:** ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N1030502 **Autosampler Model:** AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\012710.sif
Batch ID:
Results Data Set: 012710
Results Library: c:\pe\optima1\Results\Results.mdb

Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved:** 1/27/2010 07:53:54
IEC File: 011510.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location:** 113
Sample ID: LR2 **Date Collected:** 1/27/2010 09:16:50
Analyst: HSC **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76115.4	76115.4	99.1	%			09:17:25
1	Al 396.153Radial†	-22.0	5.8	4.0147	µg/L	4.0147	ppb	09:17:25
1	Ca 317.933Radial†	278.7	29.7	23.352	µg/L	23.352	ppb	09:17:45
1	Fe 238.204 Radial†	17.2	1.5	21.573	µg/L	21.573	ppb	09:17:45

1	K 766.490 Radial†	477.2	69.6	46.219 µg/L	46.219 ppb	09:17:25
1	Mg 279.077 IEC†	14.7	6.5	71.310 µg/L	71.310 ppb	09:17:45
1	Na 589.592 Radial†	519.2	-20.9	-6.0136 µg/L	-6.0136 ppb	09:17:25
1	Sr 421.552†	561.1	8.6	0.0549 µg/L	0.0549 ppb	09:17:25
1	Sc 361.383	1953413.1	1953413.1	100.52 %		09:18:47
1	Y 371.029	1235150.9	1235150.9	100.52 %		09:18:47
1	Ag 328.068†	-39.1	16.1	0.1510 µg/L	0.1510 ppb	09:18:52
1	As 188.979†	-1.8	-2.4	-5.4626 µg/L	-5.4626 ppb	09:19:13
1	B 249.677†	149.2	33.3	1.6073 µg/L	1.6073 ppb	09:19:13
1	Ba 233.527†	-20.9	-6.2	-0.1815 µg/L	-0.1815 ppb	09:19:13
1	Be 313.107†	3931.8	72.2	0.0502 µg/L	0.0502 ppb	09:18:52
1	Cd 226.502†	-124.8	11.3	0.3310 µg/L	0.3310 ppb	09:19:13
1	Co 228.616†	-48.4	-3.2	-0.1749 µg/L	-0.1749 ppb	09:19:13
1	Cr 267.716†	-74.7	8.5	0.1967 µg/L	0.1967 ppb	09:18:52
1	Cu 324.752†	4255.1	565.0	4.2514 µg/L	4.2514 ppb	09:18:52
1	Mn 257.610†	-203.5	-13.0	-0.0480 µg/L	-0.0480 ppb	09:19:13
1	Mo 202.031†	15.5	-1.8	-0.2240 µg/L	-0.2240 ppb	09:19:13
1	Ni 231.604†	339.5	2.3	0.1461 µg/L	0.1461 ppb	09:19:13
1	P 214.914†	172.0	-31.4	6.8946 µg/L	6.8946 ppb	09:19:13
1	Pb 220.353†	63.6	7.3	2.1386 µg/L	2.1386 ppb	09:19:13
1	S 181.975 Axial†	23.5	-2.1	-11.958 µg/L	-11.958 ppb	09:19:13
1	Sb 206.836†	8.3	-14.2	-15.711 µg/L	-15.711 ppb	09:19:13
1	Se 196.026†	16.6	4.1	6.5763 µg/L	6.5763 ppb	09:19:13
1	SiO2†	2441.1	149.8	31.626 µg/L	31.626 ppb	09:18:52
1	Si 251.611†	508.5	201.4	16.892 µg/L	16.892 ppb	09:19:13
1	Sn 189.927†	9608.7	9536.0	5566.1 µg/L	5566.1 ppb	09:18:52
1	Ti 334.940†	875.9	97.8	0.2386 µg/L	0.2386 ppb	09:18:52
1	Tl 190.801†	-23.5	-0.3	-0.5241 µg/L	-0.5241 ppb	09:19:13
1	U 409.014†	-308.8	-74.2	-7.0874 µg/L	-7.0874 ppb	09:18:52
1	V 292.402†	-133.2	-10.4	-0.1362 µg/L	-0.1362 ppb	09:18:52
1	Zn 213.857†	689.6	14.7	0.4166 µg/L	0.4166 ppb	09:19:13
2	Sc RADIAL	75953.1	75953.1	98.9 %		09:17:50
2	Al 396.153Radial†	15.8	43.9	30.534 µg/L	30.534 ppb	09:17:50
2	Ca 317.933Radial†	271.4	22.9	18.007 µg/L	18.007 ppb	09:18:11
2	Fe 238.204 Radial†	16.4	0.7	10.344 µg/L	10.344 ppb	09:18:11
2	K 766.490 Radial†	451.5	44.6	29.618 µg/L	29.618 ppb	09:17:50
2	Mg 279.077 IEC†	12.0	3.8	41.170 µg/L	41.170 ppb	09:18:11
2	Na 589.592 Radial†	518.8	-20.2	-5.7952 µg/L	-5.7952 ppb	09:17:50
2	Sr 421.552†	559.6	8.3	0.0529 µg/L	0.0529 ppb	09:17:50
2	Sc 361.383	1955574.6	1955574.6	100.63 %		09:19:19
2	Y 371.029	1236232.4	1236232.4	100.60 %		09:19:19
2	Ag 328.068†	-9.5	45.7	0.4254 µg/L	0.4254 ppb	09:19:24
2	As 188.979†	-3.0	-3.5	-8.0777 µg/L	-8.0777 ppb	09:19:45
2	B 249.677†	146.9	30.8	1.4923 µg/L	1.4923 ppb	09:19:45
2	Ba 233.527†	-12.6	2.0	0.0585 µg/L	0.0585 ppb	09:19:45
2	Be 313.107†	3877.2	13.6	0.0093 µg/L	0.0093 ppb	09:19:24
2	Cd 226.502†	-129.7	6.5	0.1911 µg/L	0.1911 ppb	09:19:45
2	Co 228.616†	-49.2	-3.9	-0.2140 µg/L	-0.2140 ppb	09:19:45
2	Cr 267.716†	-68.7	14.5	0.3366 µg/L	0.3366 ppb	09:19:24
2	Cu 324.752†	4236.3	541.7	4.0742 µg/L	4.0742 ppb	09:19:24
2	Mn 257.610†	-206.1	-15.4	-0.0570 µg/L	-0.0570 ppb	09:19:45
2	Mo 202.031†	15.1	-2.1	-0.2687 µg/L	-0.2687 ppb	09:19:45
2	Ni 231.604†	337.8	0.3	0.0175 µg/L	0.0175 ppb	09:19:45
2	P 214.914†	159.5	-44.0	-24.800 µg/L	-24.800 ppb	09:19:45
2	Pb 220.353†	61.9	5.6	1.6352 µg/L	1.6352 ppb	09:19:45
2	S 181.975 Axial†	23.2	-2.4	-13.854 µg/L	-13.854 ppb	09:19:45
2	Sb 206.836†	7.9	-14.5	-16.099 µg/L	-16.099 ppb	09:19:45
2	Se 196.026†	4.3	-8.1	-12.778 µg/L	-12.778 ppb	09:19:45
2	SiO2†	2461.6	167.5	35.346 µg/L	35.346 ppb	09:19:24
2	Si 251.611†	527.6	219.8	18.439 µg/L	18.439 ppb	09:19:45
2	Sn 189.927†	9449.2	9366.9	5467.4 µg/L	5467.4 ppb	09:19:24
2	Ti 334.940†	950.1	170.5	0.4223 µg/L	0.4223 ppb	09:19:24
2	Tl 190.801†	-21.9	1.3	2.1695 µg/L	2.1695 ppb	09:19:45
2	U 409.014†	-275.2	-40.5	-3.8642 µg/L	-3.8642 ppb	09:19:24
2	V 292.402†	-133.1	-10.2	-0.1310 µg/L	-0.1310 ppb	09:19:24
2	Zn 213.857†	691.7	16.1	0.4606 µg/L	0.4606 ppb	09:19:45
3	Sc RADIAL	76051.4	76051.4	99.0 %		09:18:16
3	Al 396.153Radial†	-10.7	17.2	11.931 µg/L	11.931 ppb	09:18:16
3	Ca 317.933Radial†	270.8	21.9	17.250 µg/L	17.250 ppb	09:18:37
3	Fe 238.204 Radial†	18.2	2.5	35.805 µg/L	35.805 ppb	09:18:37
3	K 766.490 Radial†	471.6	64.3	42.703 µg/L	42.703 ppb	09:18:16

3	Mg 279.077 IEC†	16.9	8.8	95.401	µg/L	95.401 ppb	09:18:37
3	Na 589.592 Radial†	521.6	-18.1	-5.1859	µg/L	-5.1859 ppb	09:18:16
3	Sr 421.552†	578.4	26.6	0.1688	µg/L	0.1688 ppb	09:18:16
3	Sc 361.383	1943892.0	1943892.0	100.03	%		09:19:51
3	Y 371.029	1228013.4	1228013.4	99.936	%		09:19:51
3	Ag 328.068†	25.2	80.3	0.7491	µg/L	0.7491 ppb	09:19:56
3	As 188.979†	-1.7	-2.3	-5.2873	µg/L	-5.2873 ppb	09:20:17
3	B 249.677†	158.6	43.4	2.0908	µg/L	2.0908 ppb	09:20:17
3	Ba 233.527†	-8.9	5.6	0.1616	µg/L	0.1616 ppb	09:20:17
3	Be 313.107†	3859.2	18.8	0.0130	µg/L	0.0130 ppb	09:19:56
3	Cd 226.502†	-120.1	15.4	0.4490	µg/L	0.4490 ppb	09:20:17
3	Co 228.616†	-38.9	6.2	0.3402	µg/L	0.3402 ppb	09:20:17
3	Cr 267.716†	-75.6	7.2	0.1662	µg/L	0.1662 ppb	09:19:56
3	Cu 324.752†	4163.5	494.2	3.7209	µg/L	3.7209 ppb	09:19:56
3	Mn 257.610†	-206.5	-17.0	-0.0618	µg/L	-0.0618 ppb	09:20:17
3	Mo 202.031†	23.4	6.2	0.7812	µg/L	0.7812 ppb	09:20:17
3	Ni 231.604†	339.1	3.6	0.2245	µg/L	0.2245 ppb	09:20:17
3	P 214.914†	170.4	-32.1	1.5362	µg/L	1.5362 ppb	09:20:17
3	Pb 220.353†	60.5	4.6	1.3164	µg/L	1.3164 ppb	09:20:17
3	S 181.975 Axial†	20.9	-4.6	-26.602	µg/L	-26.602 ppb	09:20:17
3	Sb 206.836†	8.0	-14.4	-15.885	µg/L	-15.885 ppb	09:20:17
3	Se 196.026†	-1.7	-14.1	-22.154	µg/L	-22.154 ppb	09:20:17
3	SiO2†	2435.7	156.3	32.991	µg/L	32.991 ppb	09:19:56
3	Si 251.611†	529.8	225.2	18.889	µg/L	18.889 ppb	09:20:17
3	Sn 189.927†	9144.0	9118.2	5322.2	µg/L	5322.2 ppb	09:19:56
3	Ti 334.940†	899.3	125.4	0.3055	µg/L	0.3055 ppb	09:19:56
3	Tl 190.801†	-21.5	1.5	2.6501	µg/L	2.6501 ppb	09:20:17
3	U 409.014†	-134.9	98.1	9.3544	µg/L	9.3544 ppb	09:19:56
3	V 292.402†	-139.5	-17.3	-0.1977	µg/L	-0.1977 ppb	09:19:56
3	Zn 213.857†	685.3	13.8	0.3878	µg/L	0.3878 ppb	09:20:17

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1950959.9	100.39	%	0.320				0.32%
Sc RADIAL	76040.0	99.0	%	0.11				0.11%
Y 371.029	1233132.2	100.35	%	0.363				0.36%
Ag 328.068†	47.4	0.4418	µg/L	0.29938	0.4418	ppb	0.29938	67.76%
Al 396.153Radial†	22.3	15.493	µg/L	13.6141	15.493	ppb	13.6141	87.87%
As 188.979†	-2.7	-6.2759	µg/L	1.56290	-6.2759	ppb	1.56290	24.90%
B 249.677†	35.8	1.7302	µg/L	0.31758	1.7302	ppb	0.31758	18.36%
Ba 233.527†	0.5	0.0128	µg/L	0.17606	0.0128	ppb	0.17606	>999.9%
Be 313.107†	34.9	0.0242	µg/L	0.02264	0.0242	ppb	0.02264	93.67%
Ca 317.933Radial†	24.8	19.536	µg/L	3.3261	19.536	ppb	3.3261	17.03%
Cd 226.502†	11.1	0.3237	µg/L	0.12915	0.3237	ppb	0.12915	39.89%
Co 228.616†	-0.3	-0.0162	µg/L	0.30931	-0.0162	ppb	0.30931	>999.9%
Cr 267.716†	10.1	0.2332	µg/L	0.09089	0.2332	ppb	0.09089	38.98%
Cu 324.752†	533.6	4.0155	µg/L	0.27009	4.0155	ppb	0.27009	6.73%
Fe 238.204 Radial†	1.6	22.574	µg/L	12.7603	22.574	ppb	12.7603	56.53%
K 766.490 Radial†	59.5	39.513	µg/L	8.7484	39.513	ppb	8.7484	22.14%
Mg 279.077 IEC†	6.4	69.294	µg/L	27.1715	69.294	ppb	27.1715	39.21%
Mn 257.610†	-15.1	-0.0556	µg/L	0.00703	-0.0556	ppb	0.00703	12.64%
Mo 202.031†	0.8	0.0962	µg/L	0.59368	0.0962	ppb	0.59368	617.40%
Na 589.592 Radial†	-19.7	-5.6649	µg/L	0.42895	-5.6649	ppb	0.42895	7.57%
Ni 231.604†	2.0	0.1294	µg/L	0.10453	0.1294	ppb	0.10453	80.81%
P 214.914†	-35.8	-5.4565	µg/L	16.96507	-5.4565	ppb	16.96507	310.92%
Pb 220.353†	5.8	1.6967	µg/L	0.41453	1.6967	ppb	0.41453	24.43%
S 181.975 Axial†	-3.0	-17.472	µg/L	7.9639	-17.472	ppb	7.9639	45.58%
Sb 206.836†	-14.4	-15.898	µg/L	0.1945	-15.898	ppb	0.1945	1.22%
Se 196.026†	-6.0	-9.4519	µg/L	14.65104	-9.4519	ppb	14.65104	155.01%
SiO2†	157.9	33.321	µg/L	1.8819	33.321	ppb	1.8819	5.65%
Si 251.611†	215.5	18.073	µg/L	1.0479	18.073	ppb	1.0479	5.80%
Sn 189.927†	9340.4	5451.9	µg/L	122.68	5451.9	ppb	122.68	2.25%
Sr 421.552†	14.5	0.0922	µg/L	0.06636	0.0922	ppb	0.06636	71.97%
Ti 334.940†	131.2	0.3221	µg/L	0.09295	0.3221	ppb	0.09295	28.85%
Tl 190.801†	0.8	1.4318	µg/L	1.71085	1.4318	ppb	1.71085	119.49%
U 409.014†	-5.5	-0.5324	µg/L	8.71258	-0.5324	ppb	8.71258	>999.9%
V 292.402†	-12.6	-0.1550	µg/L	0.03710	-0.1550	ppb	0.03710	23.94%
Zn 213.857†	14.9	0.4217	µg/L	0.03665	0.4217	ppb	0.03665	8.69%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 09:20:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77658.0	77658.0	101	%			09:21:02
1	Al 396.153Radial†	7654.3	7599.6	5269.5	µg/L	5269.5	ppb	09:21:02
1	Ca 317.933Radial†	7074.2	6746.2	5312.1	µg/L	5312.1	ppb	09:21:02
1	Fe 238.204 Radial†	389.4	369.3	5313.0	µg/L	5313.0	ppb	09:21:22
1	K 766.490 Radial†	8401.4	7898.7	5243.5	µg/L	5243.5	ppb	09:21:02
1	Mg 279.077 IEC†	499.2	485.5	5295.0	µg/L	5295.0	ppb	09:21:22
1	Na 589.592 Radial†	37261.3	36314.1	10428	µg/L	10428	ppb	09:21:02
1	Sr 421.552†	83392.8	81934.9	520.61	µg/L	520.61	ppb	09:21:02
1	Sc 361.383	1928098.4	1928098.4	99.213	%			09:22:26
1	Y 371.029	1215523.9	1215523.9	98.920	%			09:22:26
1	Ag 328.068†	56397.2	56899.7	534.26	µg/L	534.26	ppb	09:22:31
1	As 188.979†	238.2	239.6	551.83	µg/L	551.83	ppb	09:22:52
1	B 249.677†	10844.3	10815.2	524.25	µg/L	524.25	ppb	09:22:31
1	Ba 233.527†	18196.6	18355.5	534.25	µg/L	534.25	ppb	09:22:31
1	Be 313.107†	763452.8	765669.8	533.25	µg/L	533.25	ppb	09:22:26
1	Cd 226.502†	17886.6	18164.0	534.63	µg/L	534.63	ppb	09:22:31
1	Co 228.616†	9622.5	9743.8	537.17	µg/L	537.17	ppb	09:22:31
1	Cr 267.716†	22981.7	23246.8	539.53	µg/L	539.53	ppb	09:22:31
1	Cu 324.752†	74406.5	71328.6	537.05	µg/L	537.05	ppb	09:22:31
1	Mn 257.610†	141029.1	142337.3	526.32	µg/L	526.32	ppb	09:22:31
1	Mo 202.031†	4297.3	4314.2	542.07	µg/L	542.07	ppb	09:22:52
1	Ni 231.604†	8805.9	8540.4	537.52	µg/L	537.52	ppb	09:22:31
1	P 214.914†	1340.7	1148.9	2699.4	µg/L	2699.4	ppb	09:22:52
1	Pb 220.353†	1938.8	1898.3	553.78	µg/L	553.78	ppb	09:22:52
1	S 181.975 Axial†	212.8	188.9	1083.0	µg/L	1083.0	ppb	09:22:52
1	Sb 206.836†	520.5	502.2	558.27	µg/L	558.27	ppb	09:22:52
1	Se 196.026†	348.9	339.2	555.42	µg/L	555.42	ppb	09:22:52
1	SiO2†	29320.2	27274.0	5756.8	µg/L	5756.8	ppb	09:22:31
1	Si 251.611†	32082.3	32032.3	2686.8	µg/L	2686.8	ppb	09:22:31
1	Sn 189.927†	976.1	960.5	563.28	µg/L	563.28	ppb	09:22:52
1	Ti 334.940†	212701.2	213614.9	532.42	µg/L	532.42	ppb	09:22:26
1	Tl 190.801†	295.3	320.7	556.98	µg/L	556.98	ppb	09:22:52
1	U 409.014†	5272.7	5547.5	528.33	µg/L	528.33	ppb	09:22:31
1	V 292.402†	42624.5	43084.7	542.00	µg/L	542.00	ppb	09:22:31
1	Zn 213.857†	18948.8	18427.8	533.44	µg/L	533.44	ppb	09:22:31
2	Sc RADIAL	77663.2	77663.2	101	%			09:21:28
2	Al 396.153Radial†	7642.5	7587.4	5261.1	µg/L	5261.1	ppb	09:21:28
2	Ca 317.933Radial†	7070.7	6742.3	5309.0	µg/L	5309.0	ppb	09:21:28
2	Fe 238.204 Radial†	388.3	368.2	5297.9	µg/L	5297.9	ppb	09:21:48
2	K 766.490 Radial†	8336.8	7834.3	5200.7	µg/L	5200.7	ppb	09:21:28
2	Mg 279.077 IEC†	504.1	490.3	5346.6	µg/L	5346.6	ppb	09:21:48
2	Na 589.592 Radial†	37269.4	36319.7	10430	µg/L	10430	ppb	09:21:28
2	Sr 421.552†	83523.3	82058.5	521.39	µg/L	521.39	ppb	09:21:28
2	Sc 361.383	1937804.8	1937804.8	99.712	%			09:22:58
2	Y 371.029	1221278.1	1221278.1	99.388	%			09:22:58
2	Ag 328.068†	56570.0	56788.3	533.22	µg/L	533.22	ppb	09:23:04
2	As 188.979†	235.9	236.0	543.56	µg/L	543.56	ppb	09:23:24
2	B 249.677†	10937.4	10853.7	526.13	µg/L	526.13	ppb	09:23:04
2	Ba 233.527†	18319.6	18386.9	535.17	µg/L	535.17	ppb	09:23:04
2	Be 313.107†	761338.1	759694.5	529.09	µg/L	529.09	ppb	09:22:58
2	Cd 226.502†	18007.6	18195.0	535.55	µg/L	535.55	ppb	09:23:04
2	Co 228.616†	9671.6	9744.6	537.21	µg/L	537.21	ppb	09:23:04
2	Cr 267.716†	23027.9	23177.2	537.92	µg/L	537.92	ppb	09:23:04
2	Cu 324.752†	74686.8	71234.0	536.33	µg/L	536.33	ppb	09:23:04
2	Mn 257.610†	141618.7	142216.7	525.87	µg/L	525.87	ppb	09:23:04
2	Mo 202.031†	4272.1	4267.2	536.17	µg/L	536.17	ppb	09:23:24
2	Ni 231.604†	8860.5	8550.6	538.17	µg/L	538.17	ppb	09:23:04
2	P 214.914†	1343.1	1144.5	2689.0	µg/L	2689.0	ppb	09:23:24
2	Pb 220.353†	1936.2	1885.8	550.13	µg/L	550.13	ppb	09:23:24

2	S 181.975 Axial†	207.2	182.2	1044.7	µg/L	1044.7 ppb	09:23:24
2	Sb 206.836†	521.2	500.3	556.07	µg/L	556.07 ppb	09:23:24
2	Se 196.026†	353.6	342.2	560.01	µg/L	560.01 ppb	09:23:24
2	SiO2†	29370.4	27176.3	5736.2	µg/L	5736.2 ppb	09:23:04
2	Si 251.611†	32241.0	32029.5	2686.5	µg/L	2686.5 ppb	09:23:04
2	Sn 189.927†	977.1	956.5	560.96	µg/L	560.96 ppb	09:23:24
2	Ti 334.940†	212129.6	211967.7	528.31	µg/L	528.31 ppb	09:22:58
2	Tl 190.801†	286.3	310.2	538.92	µg/L	538.92 ppb	09:23:24
2	U 409.014†	5267.9	5516.1	525.33	µg/L	525.33 ppb	09:23:04
2	V 292.402†	42878.9	43124.7	542.45	µg/L	542.45 ppb	09:23:04
2	Zn 213.857†	19038.6	18422.2	533.27	µg/L	533.27 ppb	09:23:04
3	Sc RADIAL	77480.4	77480.4	101	%		09:21:54
3	Al 396.153Radial†	7634.3	7597.1	5269.1	µg/L	5269.1 ppb	09:21:54
3	Ca 317.933Radial†	7049.3	6737.5	5305.3	µg/L	5305.3 ppb	09:21:54
3	Fe 238.204 Radial†	385.3	366.2	5268.0	µg/L	5268.0 ppb	09:22:14
3	K 766.490 Radial†	8316.2	7833.3	5200.0	µg/L	5200.0 ppb	09:21:54
3	Mg 279.077 IEC†	505.9	493.3	5378.2	µg/L	5378.2 ppb	09:22:14
3	Na 589.592 Radial†	37205.3	36343.1	10436	µg/L	10436 ppb	09:21:54
3	Sr 421.552†	83333.4	82065.1	521.43	µg/L	521.43 ppb	09:21:54
3	Sc 361.383	1926729.9	1926729.9	99.143	%		09:23:31
3	Y 371.029	1212565.3	1212565.3	98.679	%		09:23:31
3	Ag 328.068†	55069.2	55600.6	521.97	µg/L	521.97 ppb	09:23:37
3	As 188.979†	216.0	217.3	500.57	µg/L	500.57 ppb	09:23:57
3	B 249.677†	10564.3	10540.5	510.86	µg/L	510.86 ppb	09:23:37
3	Ba 233.527†	17467.5	17633.1	513.22	µg/L	513.22 ppb	09:23:37
3	Be 313.107†	746564.4	749181.9	521.77	µg/L	521.77 ppb	09:23:31
3	Cd 226.502†	17128.7	17412.3	512.49	µg/L	512.49 ppb	09:23:37
3	Co 228.616†	9167.6	9291.9	512.19	µg/L	512.19 ppb	09:23:37
3	Cr 267.716†	21487.9	21756.5	504.95	µg/L	504.95 ppb	09:23:37
3	Cu 324.752†	71144.3	68091.4	512.70	µg/L	512.70 ppb	09:23:37
3	Mn 257.610†	134069.3	135418.4	500.75	µg/L	500.75 ppb	09:23:37
3	Mo 202.031†	3775.5	3790.9	476.35	µg/L	476.35 ppb	09:23:57
3	Ni 231.604†	8430.5	8168.0	514.09	µg/L	514.09 ppb	09:23:37
3	P 214.914†	1217.2	1025.2	2405.0	µg/L	2405.0 ppb	09:23:57
3	Pb 220.353†	1755.2	1714.4	500.04	µg/L	500.04 ppb	09:23:57
3	S 181.975 Axial†	195.6	171.8	984.78	µg/L	984.78 ppb	09:23:57
3	Sb 206.836†	476.4	458.1	508.78	µg/L	508.78 ppb	09:23:57
3	Se 196.026†	325.9	316.3	518.99	µg/L	518.99 ppb	09:23:57
3	SiO2†	28347.8	26314.2	5554.2	µg/L	5554.2 ppb	09:23:37
3	Si 251.611†	30961.1	30924.4	2593.8	µg/L	2593.8 ppb	09:23:37
3	Sn 189.927†	852.9	836.9	491.17	µg/L	491.17 ppb	09:23:57
3	Ti 334.940†	207646.6	208668.9	520.08	µg/L	520.08 ppb	09:23:31
3	Tl 190.801†	268.9	294.3	511.45	µg/L	511.45 ppb	09:23:57
3	U 409.014†	5062.2	5339.0	508.44	µg/L	508.44 ppb	09:23:37
3	V 292.402†	40463.4	40935.5	514.67	µg/L	514.67 ppb	09:23:37
3	Zn 213.857†	18060.9	17545.8	507.87	µg/L	507.87 ppb	09:23:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1930877.7	99.356	%	0.3107				0.31%
Sc RADIAL	77600.5	101	%	0.1				0.13%
Y 371.029	1216455.8	98.996	%	0.3606				0.36%
Ag 328.068†	56429.5	529.82	µg/L	6.816	529.82	ppb	6.816	1.29%
QC value within limits for Ag 328.068 Recovery = 105.96%								
Al 396.153Radial†	7594.7	5266.6	µg/L	4.71	5266.6	ppb	4.71	0.09%
QC value within limits for Al 396.153Radial Recovery = 105.33%								
As 188.979†	231.0	531.98	µg/L	27.521	531.98	ppb	27.521	5.17%
QC value within limits for As 188.979 Recovery = 106.40%								
B 249.677†	10736.5	520.41	µg/L	8.329	520.41	ppb	8.329	1.60%
QC value within limits for B 249.677 Recovery = 104.08%								
Ba 233.527†	18125.2	527.54	µg/L	12.417	527.54	ppb	12.417	2.35%
QC value within limits for Ba 233.527 Recovery = 105.51%								
Be 313.107†	758182.1	528.03	µg/L	5.813	528.03	ppb	5.813	1.10%
QC value within limits for Be 313.107 Recovery = 105.61%								
Ca 317.933Radial†	6742.0	5308.8	µg/L	3.41	5308.8	ppb	3.41	0.06%
QC value within limits for Ca 317.933Radial Recovery = 106.18%								
Cd 226.502†	17923.8	527.55	µg/L	13.058	527.55	ppb	13.058	2.48%
QC value within limits for Cd 226.502 Recovery = 105.51%								
Co 228.616†	9593.4	528.86	µg/L	14.432	528.86	ppb	14.432	2.73%

QC value within limits for Co 228.616 Recovery = 105.77%

Cr 267.716†	22726.8	527.47 µg/L	19.517	527.47 ppb	19.517	3.70%

QC value within limits for Cr 267.716 Recovery = 105.49%

Cu 324.752†	70218.0	528.69 µg/L	13.855	528.69 ppb	13.855	2.62%

QC value within limits for Cu 324.752 Recovery = 105.74%

Fe 238.204 Radial†	367.9	5292.9 µg/L	22.89	5292.9 ppb	22.89	0.43%

QC value within limits for Fe 238.204 Radial Recovery = 105.86%

K 766.490 Radial†	7855.4	5214.7 µg/L	24.90	5214.7 ppb	24.90	0.48%

QC value within limits for K 766.490 Radial Recovery = 104.29%

Mg 279.077 IEC†	489.7	5339.9 µg/L	41.97	5339.9 ppb	41.97	0.79%

QC value within limits for Mg 279.077 IEC Recovery = 106.80%

Mn 257.610†	139990.8	517.65 µg/L	14.635	517.65 ppb	14.635	2.83%

QC value within limits for Mn 257.610 Recovery = 103.53%

Mo 202.031†	4124.1	518.20 µg/L	36.361	518.20 ppb	36.361	7.02%

QC value within limits for Mo 202.031 Recovery = 103.64%

Na 589.592 Radial†	36325.7	10431 µg/L	4.4	10431 ppb	4.4	0.04%

QC value within limits for Na 589.592 Radial Recovery = 104.31%

Ni 231.604†	8419.7	529.93 µg/L	13.718	529.93 ppb	13.718	2.59%

QC value within limits for Ni 231.604 Recovery = 105.99%

P 214.914†	1106.2	2597.8 µg/L	167.07	2597.8 ppb	167.07	6.43%

QC value within limits for P 214.914 Recovery = 103.91%

Pb 220.353†	1832.8	534.65 µg/L	30.029	534.65 ppb	30.029	5.62%

QC value within limits for Pb 220.353 Recovery = 106.93%

S 181.975 Axial†	181.0	1037.5 µg/L	49.51	1037.5 ppb	49.51	4.77%

QC value within limits for S 181.975 Axial Recovery = 103.75%

Sb 206.836†	486.9	541.04 µg/L	27.961	541.04 ppb	27.961	5.17%

QC value within limits for Sb 206.836 Recovery = 108.21%

Se 196.026†	332.6	544.81 µg/L	22.478	544.81 ppb	22.478	4.13%

QC value within limits for Se 196.026 Recovery = 108.96%

SiO2†	26921.5	5682.4 µg/L	111.50	5682.4 ppb	111.50	1.96%

QC value within limits for SiO2 Recovery = 106.26%

Si 251.611†	31662.0	2655.7 µg/L	53.59	2655.7 ppb	53.59	2.02%

QC value within limits for Si 251.611 Recovery = 106.23%

Sn 189.927†	917.9	538.47 µg/L	40.983	538.47 ppb	40.983	7.61%

QC value within limits for Sn 189.927 Recovery = 107.69%

Sr 421.552†	82019.5	521.14 µg/L	0.466	521.14 ppb	0.466	0.09%

QC value within limits for Sr 421.552 Recovery = 104.23%

Ti 334.940†	211417.2	526.93 µg/L	6.284	526.93 ppb	6.284	1.19%

QC value within limits for Ti 334.940 Recovery = 105.39%

Tl 190.801†	308.4	535.78 µg/L	22.931	535.78 ppb	22.931	4.28%

QC value within limits for Tl 190.801 Recovery = 107.16%

U 409.014†	5467.5	520.70 µg/L	10.726	520.70 ppb	10.726	2.06%

QC value within limits for U 409.014 Recovery = 104.14%

V 292.402†	42381.6	533.04 µg/L	15.911	533.04 ppb	15.911	2.99%

QC value within limits for V 292.402 Recovery = 106.61%

Zn 213.857†	18131.9	524.86 µg/L	14.716	524.86 ppb	14.716	2.80%

QC value within limits for Zn 213.857 Recovery = 104.97%

All analyte(s) passed QC.

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 09:24:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	75637.8	75637.8	98.5	%			09:24:40
1	Al 396.153Radial†	7.5	35.5	24.723	µg/L	24.723	ppb	09:24:40
1	Ca 317.933Radial†	253.4	5.7	4.5028	µg/L	4.5028	ppb	09:25:00
1	Fe 238.204 Radial†	17.4	1.8	25.316	µg/L	25.316	ppb	09:25:00
1	K 766.490 Radial†	447.3	42.3	28.090	µg/L	28.090	ppb	09:24:40
1	Mg 279.077 IEC†	13.2	5.1	55.287	µg/L	55.287	ppb	09:25:00
1	Na 589.592 Radial†	598.9	63.3	18.182	µg/L	18.182	ppb	09:24:40
1	Sr 421.552†	598.6	50.2	0.3191	µg/L	0.3191	ppb	09:24:40
1	Sc 361.383	1940481.8	1940481.8	99.850	%			09:26:02
1	Y 371.029	1228957.2	1228957.2	100.01	%			09:26:02
1	Ag 328.068†	-39.6	15.4	0.1472	µg/L	0.1472	ppb	09:26:08
1	As 188.979†	0.3	-0.2	-0.5715	µg/L	-0.5715	ppb	09:26:28
1	B 249.677†	139.3	24.3	1.1694	µg/L	1.1694	ppb	09:26:08
1	Ba 233.527†	-9.7	4.8	0.1397	µg/L	0.1397	ppb	09:26:28
1	Be 313.107†	3905.4	71.9	0.0499	µg/L	0.0499	ppb	09:26:08
1	Cd 226.502†	-130.3	5.0	0.1447	µg/L	0.1447	ppb	09:26:28
1	Co 228.616†	-39.3	5.6	0.3092	µg/L	0.3092	ppb	09:26:28
1	Cr 267.716†	-76.9	5.8	0.1337	µg/L	0.1337	ppb	09:26:08
1	Cu 324.752†	4078.0	415.9	3.1304	µg/L	3.1304	ppb	09:26:08
1	Mn 257.610†	-194.3	-5.1	-0.0178	µg/L	-0.0178	ppb	09:26:28
1	Mo 202.031†	3.1	-14.1	-1.7652	µg/L	-1.7652	ppb	09:26:28
1	Ni 231.604†	343.3	8.4	0.5283	µg/L	0.5283	ppb	09:26:28
1	P 214.914†	209.0	6.8	16.022	µg/L	16.022	ppb	09:26:28
1	Pb 220.353†	59.7	3.8	1.1053	µg/L	1.1053	ppb	09:26:28
1	S 181.975 Axial†	20.6	-4.9	-28.219	µg/L	-28.219	ppb	09:26:28
1	Sb 206.836†	27.8	5.4	5.9530	µg/L	5.9530	ppb	09:26:28
1	Se 196.026†	8.0	-4.4	-6.8545	µg/L	-6.8545	ppb	09:26:28
1	SiO2†	2273.7	-1.7	-0.3611	µg/L	-0.3611	ppb	09:26:08
1	Si 251.611†	332.5	28.5	2.3879	µg/L	2.3879	ppb	09:26:28
1	Sn 189.927†	23.4	0.0	0.0352	µg/L	0.0352	ppb	09:26:28
1	Ti 334.940†	930.9	158.6	0.3912	µg/L	0.3912	ppb	09:26:08
1	Tl 190.801†	-22.4	0.7	1.1502	µg/L	1.1502	ppb	09:26:28
1	U 409.014†	-220.3	12.3	1.1736	µg/L	1.1736	ppb	09:26:08
1	V 292.402†	-98.1	23.9	0.2868	µg/L	0.2868	ppb	09:26:08
1	Zn 213.857†	691.4	21.2	0.6051	µg/L	0.6051	ppb	09:26:28
2	Sc RADIAL	75398.5	75398.5	98.2	%			09:25:06
2	Al 396.153Radial†	-2.5	25.4	17.670	µg/L	17.670	ppb	09:25:06
2	Ca 317.933Radial†	263.2	16.5	13.019	µg/L	13.019	ppb	09:25:26
2	Fe 238.204 Radial†	17.1	1.5	21.901	µg/L	21.901	ppb	09:25:26
2	K 766.490 Radial†	432.2	28.4	18.831	µg/L	18.831	ppb	09:25:06
2	Mg 279.077 IEC†	11.0	2.9	31.752	µg/L	31.752	ppb	09:25:26
2	Na 589.592 Radial†	542.7	8.0	2.2848	µg/L	2.2848	ppb	09:25:06
2	Sr 421.552†	543.1	-4.4	-0.0278	µg/L	-0.0278	ppb	09:25:06
2	Sc 361.383	1951012.5	1951012.5	100.39	%			09:26:35
2	Y 371.029	1235099.7	1235099.7	100.51	%			09:26:35
2	Ag 328.068†	-2.8	52.3	0.4879	µg/L	0.4879	ppb	09:26:40
2	As 188.979†	-2.6	-3.2	-7.2830	µg/L	-7.2830	ppb	09:27:01
2	B 249.677†	173.9	58.0	2.8094	µg/L	2.8094	ppb	09:26:40
2	Ba 233.527†	-5.9	8.7	0.2520	µg/L	0.2520	ppb	09:27:01
2	Be 313.107†	3970.8	115.8	0.0807	µg/L	0.0807	ppb	09:26:40
2	Cd 226.502†	-129.2	6.7	0.1962	µg/L	0.1962	ppb	09:27:01
2	Co 228.616†	-40.3	4.8	0.2665	µg/L	0.2665	ppb	09:27:01
2	Cr 267.716†	-69.5	13.5	0.3135	µg/L	0.3135	ppb	09:26:40
2	Cu 324.752†	4071.7	387.6	2.9172	µg/L	2.9172	ppb	09:26:40
2	Mn 257.610†	-178.8	11.4	0.0437	µg/L	0.0437	ppb	09:27:01
2	Mo 202.031†	19.3	2.0	0.2532	µg/L	0.2532	ppb	09:27:01
2	Ni 231.604†	346.6	9.8	0.6182	µg/L	0.6182	ppb	09:27:01
2	P 214.914†	209.2	5.9	13.785	µg/L	13.785	ppb	09:27:01
2	Pb 220.353†	45.0	-11.1	-3.2524	µg/L	-3.2524	ppb	09:27:01

2	S 181.975 Axial†	22.4	-3.2	-18.564 µg/L	-18.564 ppb	09:27:01
2	Sb 206.836†	25.9	3.4	3.7089 µg/L	3.7089 ppb	09:27:01
2	Se 196.026†	14.4	1.9	3.0609 µg/L	3.0609 ppb	09:27:01
2	SiO2†	2263.2	-24.4	-5.1500 µg/L	-5.1500 ppb	09:26:40
2	Si 251.611†	335.3	29.5	2.4734 µg/L	2.4734 ppb	09:27:01
2	Sn 189.927†	25.2	1.7	0.9914 µg/L	0.9914 ppb	09:27:01
2	Ti 334.940†	787.9	11.2	0.0257 µg/L	0.0257 ppb	09:26:40
2	Tl 190.801†	-20.4	2.8	4.8252 µg/L	4.8252 ppb	09:27:01
2	U 409.014†	-187.1	46.6	4.4407 µg/L	4.4407 ppb	09:26:40
2	V 292.402†	-131.0	-8.4	-0.0960 µg/L	-0.0960 ppb	09:26:40
2	Zn 213.857†	702.4	28.4	0.8167 µg/L	0.8167 ppb	09:27:01
3	Sc RADIAL	75525.1	75525.1	98.3 %		09:25:32
3	Al 396.153Radial†	-19.4	8.3	5.7463 µg/L	5.7463 ppb	09:25:32
3	Ca 317.933Radial†	255.6	8.3	6.5139 µg/L	6.5139 ppb	09:25:52
3	Fe 238.204 Radial†	15.8	0.1	2.1414 µg/L	2.1414 ppb	09:25:52
3	K 766.490 Radial†	493.8	90.2	59.904 µg/L	59.904 ppb	09:25:32
3	Mg 279.077 IEC†	11.4	3.3	35.792 µg/L	35.792 ppb	09:25:52
3	Na 589.592 Radial†	566.1	30.8	8.8572 µg/L	8.8572 ppb	09:25:32
3	Sr 421.552†	535.2	-13.3	-0.0844 µg/L	-0.0844 ppb	09:25:32
3	Sc 361.383	1946266.4	1946266.4	100.15 %		09:27:07
3	Y 371.029	1231901.9	1231901.9	100.25 %		09:27:07
3	Ag 328.068†	-15.5	39.7	0.3704 µg/L	0.3704 ppb	09:27:12
3	As 188.979†	1.9	1.3	3.0197 µg/L	3.0197 ppb	09:27:33
3	B 249.677†	167.5	52.0	2.5289 µg/L	2.5289 ppb	09:27:12
3	Ba 233.527†	-4.5	10.0	0.2914 µg/L	0.2914 ppb	09:27:33
3	Be 313.107†	4039.3	193.9	0.1350 µg/L	0.1350 ppb	09:27:12
3	Cd 226.502†	-125.7	10.0	0.2935 µg/L	0.2935 ppb	09:27:33
3	Co 228.616†	-44.3	0.7	0.0406 µg/L	0.0406 ppb	09:27:33
3	Cr 267.716†	-92.6	-9.7	-0.2248 µg/L	-0.2248 ppb	09:27:12
3	Cu 324.752†	4080.9	406.7	3.0580 µg/L	3.0580 ppb	09:27:12
3	Mn 257.610†	-196.0	-6.2	-0.0240 µg/L	-0.0240 ppb	09:27:33
3	Mo 202.031†	17.0	-0.2	-0.0311 µg/L	-0.0311 ppb	09:27:33
3	Ni 231.604†	346.6	10.7	0.6731 µg/L	0.6731 ppb	09:27:33
3	P 214.914†	204.6	1.8	4.0688 µg/L	4.0688 ppb	09:27:33
3	Pb 220.353†	74.3	18.2	5.3233 µg/L	5.3233 ppb	09:27:33
3	S 181.975 Axial†	23.6	-1.9	-11.103 µg/L	-11.103 ppb	09:27:33
3	Sb 206.836†	26.6	4.2	4.6242 µg/L	4.6242 ppb	09:27:33
3	Se 196.026†	3.8	-8.7	-13.694 µg/L	-13.694 ppb	09:27:33
3	SiO2†	2249.1	-32.9	-6.9535 µg/L	-6.9535 ppb	09:27:12
3	Si 251.611†	320.7	15.8	1.3216 µg/L	1.3216 ppb	09:27:33
3	Sn 189.927†	23.8	0.3	0.1958 µg/L	0.1958 ppb	09:27:33
3	Ti 334.940†	837.0	62.1	0.1522 µg/L	0.1522 ppb	09:27:12
3	Tl 190.801†	-21.0	2.1	3.5596 µg/L	3.5596 ppb	09:27:33
3	U 409.014†	-360.3	-126.8	-12.103 µg/L	-12.103 ppb	09:27:12
3	V 292.402†	-115.8	6.5	0.0680 µg/L	0.0680 ppb	09:27:12
3	Zn 213.857†	692.1	19.8	0.5667 µg/L	0.5667 ppb	09:27:33

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1945920.2	100.13	%	0.271				0.27%
Sc RADIAL	75520.5	98.3	%	0.16				0.16%
Y 371.029	1231986.3	100.26	%	0.250				0.25%
Ag 328.068†	35.8	0.3351	µg/L	0.17304	0.3351	ppb	0.17304	51.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	23.1	16.046	µg/L	9.5920	16.046	ppb	9.5920	59.78%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.7	-1.6116	µg/L	5.22951	-1.6116	ppb	5.22951	324.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	44.8	2.1693	µg/L	0.87715	2.1693	ppb	0.87715	40.44%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.8	0.2277	µg/L	0.07871	0.2277	ppb	0.07871	34.57%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	127.2	0.0886	µg/L	0.04310	0.0886	ppb	0.04310	48.67%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.2	8.0118	µg/L	4.45118	8.0118	ppb	4.45118	55.56%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	7.2	0.2115	µg/L	0.07556	0.2115	ppb	0.07556	35.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	3.7	0.2055	µg/L	0.14432	0.2055	ppb	0.14432	70.24%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                3.2      0.0742 µg/L       0.27403      0.0742 ppb        0.27403 369.56%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              403.4      3.0352 µg/L       0.10842      3.0352 ppb        0.10842   3.57%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.1      16.453 µg/L       12.5113      16.453 ppb        12.5113  76.04%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         53.6      35.608 µg/L       21.5442      35.608 ppb        21.5442  60.50%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            3.8      40.944 µg/L       12.5847      40.944 ppb        12.5847  30.74%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                0.0      0.0006 µg/L       0.03742      0.0006 ppb        0.03742 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -4.1     -0.5143 µg/L       1.09253     -0.5143 ppb        1.09253 212.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        34.0      9.7747 µg/L       7.98833      9.7747 ppb        7.98833  81.72%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                9.6      0.6065 µg/L       0.07311      0.6065 ppb        0.07311  12.05%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 4.9      11.292 µg/L        6.3546      11.292 ppb         6.3546  56.28%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                3.6      1.0587 µg/L       4.28806      1.0587 ppb        4.28806 405.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.4     -19.295 µg/L        8.5811     -19.295 ppb         8.5811  44.47%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                4.3      4.7621 µg/L       1.12836      4.7621 ppb        1.12836  23.69%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -3.7     -5.8292 µg/L       8.42448     -5.8292 ppb        8.42448 144.52%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -19.7     -4.1549 µg/L       3.40702     -4.1549 ppb        3.40702  82.00%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               24.6      2.0610 µg/L       0.64175      2.0610 ppb        0.64175  31.14%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                0.7      0.4075 µg/L       0.51203      0.4075 ppb        0.51203 125.66%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               10.9      0.0689 µg/L       0.21844      0.0689 ppb        0.21844 316.82%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               77.3      0.1897 µg/L       0.18564      0.1897 ppb        0.18564  97.86%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.8      3.1783 µg/L       1.86690      3.1783 ppb        1.86690  58.74%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -22.6     -2.1629 µg/L       8.76206     -2.1629 ppb        8.76206 405.10%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 7.4      0.0863 µg/L       0.19206      0.0863 ppb        0.19206 222.59%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               23.1      0.6628 µg/L       0.13460      0.6628 ppb        0.13460  20.31%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Analysis Begun

Start Time: 1/27/2010 09:30:23
Logged In Analyst: optima
Spectrometer Model: Optima 4300 DV, S/N 077N1030502

Plasma On Time: 1/25/2010 05:31:26
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\012710B.sif
Batch ID:
Results Data Set: 012710
Results Library: c:\pe\optima1\Results\Results.mdb

Sequence No.: 1
Sample ID: 1202011874|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 301
Date Collected: 1/27/2010 09:30:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011874|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76035.8	76035.8	99.0	%			09:31:02
1	Al 396.153Radial†	-29.6	-1.9	-1.3588	µg/L	-1.3588	ppb	09:31:02
1	Ca 317.933Radial†	278.7	29.9	23.565	µg/L	23.565	ppb	09:31:22
1	Fe 238.204 Radial†	24.8	9.2	131.41	µg/L	131.41	ppb	09:31:22
1	K 766.490 Radial†	444.2	36.7	24.387	µg/L	24.387	ppb	09:31:02
1	Mg 279.077 IEC†	12.5	4.3	46.593	µg/L	46.593	ppb	09:31:22
1	Na 589.592 Radial†	672.1	134.1	38.514	µg/L	38.514	ppb	09:31:02
1	Sr 421.552†	546.5	-5.6	-0.0354	µg/L	-0.0354	ppb	09:31:02
1	Sc 361.383	1940159.8	1940159.8	99.834	%			09:32:24
1	Y 371.029	1223416.0	1223416.0	99.562	%			09:32:24
1	Ag 328.068†	-9.7	45.4	0.4307	µg/L	0.4307	ppb	09:32:29
1	As 188.979†	-1.8	-2.4	-5.5420	µg/L	-5.5420	ppb	09:32:50
1	B 249.677†	160.3	45.4	2.1396	µg/L	2.1396	ppb	09:32:50
1	Ba 233.527†	-14.9	-0.4	-0.0117	µg/L	-0.0117	ppb	09:32:50
1	Be 313.107†	3914.6	81.7	0.0568	µg/L	0.0568	ppb	09:32:29
1	Cd 226.502†	-131.8	3.4	0.0854	µg/L	0.0854	ppb	09:32:50
1	Co 228.616†	-54.0	-9.1	-0.5006	µg/L	-0.5006	ppb	09:32:50
1	Cr 267.716†	-78.1	4.6	0.1067	µg/L	0.1067	ppb	09:32:29
1	Cu 324.752†	4077.6	416.2	3.1478	µg/L	3.1478	ppb	09:32:29
1	Mn 257.610†	33.2	222.7	0.8385	µg/L	0.8385	ppb	09:32:50
1	Mo 202.031†	18.8	1.6	0.2090	µg/L	0.2090	ppb	09:32:50
1	Ni 231.604†	332.4	-2.4	-0.1501	µg/L	-0.1501	ppb	09:32:50
1	P 214.914†	205.7	3.6	8.1942	µg/L	8.1942	ppb	09:32:50
1	Pb 220.353†	62.9	7.0	2.0469	µg/L	2.0469	ppb	09:32:50
1	S 181.975 Axial†	23.9	-1.6	-9.0154	µg/L	-9.0154	ppb	09:32:50
1	Sb 206.836†	19.8	-2.5	-2.7843	µg/L	-2.7843	ppb	09:32:50
1	Se 196.026†	10.3	-2.1	-2.8580	µg/L	-2.8580	ppb	09:32:50
1	SiO2†	2376.1	101.3	21.385	µg/L	21.385	ppb	09:32:29
1	Si 251.611†	480.9	177.2	14.866	µg/L	14.866	ppb	09:32:50
1	Sn 189.927†	28.7	5.3	3.1262	µg/L	3.1262	ppb	09:32:50
1	Ti 334.940†	974.6	202.5	0.5018	µg/L	0.5018	ppb	09:32:29
1	Tl 190.801†	-17.2	5.9	10.144	µg/L	10.144	ppb	09:32:50
1	U 409.014†	-292.2	-59.7	-5.7178	µg/L	-5.7178	ppb	09:32:29
1	V 292.402†	-127.3	-5.3	-0.0635	µg/L	-0.0635	ppb	09:32:29
1	Zn 213.857†	713.2	43.0	1.2417	µg/L	1.2417	ppb	09:32:50
2	Sc RADIAL	75032.5	75032.5	97.7	%			09:31:27
2	Al 396.153Radial†	-9.0	18.7	13.005	µg/L	13.005	ppb	09:31:27
2	Ca 317.933Radial†	264.3	18.9	14.911	µg/L	14.911	ppb	09:31:48
2	Fe 238.204 Radial†	22.4	7.1	101.63	µg/L	101.63	ppb	09:31:48
2	K 766.490 Radial†	413.2	11.0	7.3021	µg/L	7.3021	ppb	09:31:27
2	Mg 279.077 IEC†	12.6	4.6	50.034	µg/L	50.034	ppb	09:31:48
2	Na 589.592 Radial†	691.5	163.1	46.829	µg/L	46.829	ppb	09:31:27
2	Sr 421.552†	569.0	24.8	0.1577	µg/L	0.1577	ppb	09:31:27
2	Sc 361.383	1938373.6	1938373.6	99.742	%			09:32:56
2	Y 371.029	1223460.2	1223460.2	99.566	%			09:32:56
2	Ag 328.068†	31.8	87.0	0.8180	µg/L	0.8180	ppb	09:33:02
2	As 188.979†	-3.1	-3.6	-8.4131	µg/L	-8.4131	ppb	09:33:22

2	B 249.677†	161.0	46.2	2.1959	µg/L	2.1959 ppb	09:33:22
2	Ba 233.527†	-24.6	-10.1	-0.2940	µg/L	-0.2940 ppb	09:33:22
2	Be 313.107†	3937.7	108.5	0.0755	µg/L	0.0755 ppb	09:33:02
2	Cd 226.502†	-128.5	6.6	0.1825	µg/L	0.1825 ppb	09:33:22
2	Co 228.616†	-43.6	1.3	0.0703	µg/L	0.0703 ppb	09:33:22
2	Cr 267.716†	-69.2	13.5	0.3124	µg/L	0.3124 ppb	09:33:02
2	Cu 324.752†	4108.7	451.2	3.4063	µg/L	3.4063 ppb	09:33:02
2	Mn 257.610†	48.4	238.1	0.8910	µg/L	0.8910 ppb	09:33:22
2	Mo 202.031†	14.9	-2.3	-0.2850	µg/L	-0.2850 ppb	09:33:22
2	Ni 231.604†	323.3	-11.3	-0.7102	µg/L	-0.7102 ppb	09:33:22
2	P 214.914†	201.0	-1.0	-2.7815	µg/L	-2.7815 ppb	09:33:22
2	Pb 220.353†	57.7	1.9	0.5542	µg/L	0.5542 ppb	09:33:22
2	S 181.975 Axial†	25.8	0.4	2.1474	µg/L	2.1474 ppb	09:33:22
2	Sb 206.836†	24.8	2.5	2.7339	µg/L	2.7339 ppb	09:33:22
2	Se 196.026†	16.0	3.6	6.0302	µg/L	6.0302 ppb	09:33:22
2	SiO2†	2407.0	134.4	28.370	µg/L	28.370 ppb	09:33:02
2	Si 251.611†	476.3	173.1	14.517	µg/L	14.517 ppb	09:33:22
2	Sn 189.927†	29.9	6.5	3.8318	µg/L	3.8318 ppb	09:33:22
2	Ti 334.940†	861.7	90.3	0.2215	µg/L	0.2215 ppb	09:33:02
2	Tl 190.801†	-22.3	0.7	1.2713	µg/L	1.2713 ppb	09:33:22
2	U 409.014†	-235.2	-2.8	-0.2832	µg/L	-0.2832 ppb	09:33:02
2	V 292.402†	-110.0	11.9	0.1516	µg/L	0.1516 ppb	09:33:02
2	Zn 213.857†	720.0	50.6	1.4638	µg/L	1.4638 ppb	09:33:22
3	Sc RADIAL	75552.6	75552.6	98.4	%		09:31:53
3	Al 396.153Radial†	-16.9	10.8	7.5284	µg/L	7.5284 ppb	09:31:53
3	Ca 317.933Radial†	269.6	22.4	17.674	µg/L	17.674 ppb	09:32:14
3	Fe 238.204 Radial†	22.5	7.0	101.11	µg/L	101.11 ppb	09:32:14
3	K 766.490 Radial†	468.7	64.5	42.835	µg/L	42.835 ppb	09:31:53
3	Mg 279.077 IEC†	13.5	5.4	59.039	µg/L	59.039 ppb	09:32:14
3	Na 589.592 Radial†	698.4	165.2	47.434	µg/L	47.434 ppb	09:31:53
3	Sr 421.552†	589.4	41.6	0.2642	µg/L	0.2642 ppb	09:31:53
3	Sc 361.383	1951193.6	1951193.6	100.40	%		09:33:28
3	Y 371.029	1230356.2	1230356.2	100.13	%		09:33:28
3	Ag 328.068†	-46.1	9.2	0.0942	µg/L	0.0942 ppb	09:33:34
3	As 188.979†	-1.7	-2.3	-5.2584	µg/L	-5.2584 ppb	09:33:54
3	B 249.677†	162.1	46.3	2.1982	µg/L	2.1982 ppb	09:33:54
3	Ba 233.527†	-12.7	1.9	0.0547	µg/L	0.0547 ppb	09:33:54
3	Be 313.107†	3964.3	109.0	0.0758	µg/L	0.0758 ppb	09:33:34
3	Cd 226.502†	-116.8	19.2	0.5518	µg/L	0.5518 ppb	09:33:54
3	Co 228.616†	-46.2	-1.0	-0.0579	µg/L	-0.0579 ppb	09:33:54
3	Cr 267.716†	-70.7	12.4	0.2884	µg/L	0.2884 ppb	09:33:34
3	Cu 324.752†	4152.8	468.0	3.5328	µg/L	3.5328 ppb	09:33:34
3	Mn 257.610†	17.6	207.1	0.7760	µg/L	0.7760 ppb	09:33:54
3	Mo 202.031†	11.8	-5.5	-0.6820	µg/L	-0.6820 ppb	09:33:54
3	Ni 231.604†	327.9	-8.8	-0.5550	µg/L	-0.5550 ppb	09:33:54
3	P 214.914†	210.0	6.6	15.483	µg/L	15.483 ppb	09:33:54
3	Pb 220.353†	58.7	2.6	0.7265	µg/L	0.7265 ppb	09:33:54
3	S 181.975 Axial†	25.7	0.1	0.7099	µg/L	0.7099 ppb	09:33:54
3	Sb 206.836†	23.8	1.3	1.3939	µg/L	1.3939 ppb	09:33:54
3	Se 196.026†	5.9	-6.6	-9.9820	µg/L	-9.9820 ppb	09:33:54
3	SiO2†	2383.9	95.6	20.173	µg/L	20.173 ppb	09:33:34
3	Si 251.611†	475.4	169.0	14.178	µg/L	14.178 ppb	09:33:54
3	Sn 189.927†	26.7	3.2	1.8837	µg/L	1.8837 ppb	09:33:54
3	Ti 334.940†	907.5	130.3	0.3205	µg/L	0.3205 ppb	09:33:34
3	Tl 190.801†	-19.1	4.0	6.9393	µg/L	6.9393 ppb	09:33:54
3	U 409.014†	-128.4	105.0	10.009	µg/L	10.009 ppb	09:33:34
3	V 292.402†	-98.9	23.6	0.3046	µg/L	0.3046 ppb	09:33:34
3	Zn 213.857†	712.1	37.9	1.0934	µg/L	1.0934 ppb	09:33:54

Mean Data: 1202011874|940165|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1943242.3	99.992	%	0.3573				0.36%
Sc RADIAL	75540.3	98.3	%	0.65				0.66%
Y 371.029	1225744.1	99.751	%	0.3251				0.33%
Ag 328.068†	47.2	0.4477	µg/L	0.36219	0.4477	ppb	0.36219	80.91%
Al 396.153Radial†	9.2	6.3916	µg/L	7.24917	6.3916	ppb	7.24917	113.42%
As 188.979†	-2.8	-6.4045	µg/L	1.74529	-6.4045	ppb	1.74529	27.25%
B 249.677†	46.0	2.1779	µg/L	0.03319	2.1779	ppb	0.03319	1.52%
Ba 233.527†	-2.9	-0.0836	µg/L	0.18515	-0.0836	ppb	0.18515	221.34%

Be 313.107†	99.7	0.0694	µg/L	0.01091	0.0694	ppb	0.01091 15.73%
Ca 317.933Radial†	23.8	18.716	µg/L	4.4201	18.716	ppb	4.4201 23.62%
Cd 226.502†	9.7	0.2733	µg/L	0.24608	0.2733	ppb	0.24608 90.05%
Co 228.616†	-2.9	-0.1627	µg/L	0.29957	-0.1627	ppb	0.29957 184.10%
Cr 267.716†	10.2	0.2358	µg/L	0.11244	0.2358	ppb	0.11244 47.67%
Cu 324.752†	445.1	3.3623	µg/L	0.19623	3.3623	ppb	0.19623 5.84%
Fe 238.204 Radial†	7.8	111.39	µg/L	17.342	111.39	ppb	17.342 15.57%
K 766.490 Radial†	37.4	24.841	µg/L	17.7707	24.841	ppb	17.7707 71.54%
Mg 279.077 IEC†	4.8	51.889	µg/L	6.4270	51.889	ppb	6.4270 12.39%
Mn 257.610†	222.6	0.8352	µg/L	0.05754	0.8352	ppb	0.05754 6.89%
Mo 202.031†	-2.0	-0.2527	µg/L	0.44641	-0.2527	ppb	0.44641 176.68%
Na 589.592 Radial†	154.1	44.259	µg/L	4.9845	44.259	ppb	4.9845 11.26%
Ni 231.604†	-7.5	-0.4718	µg/L	0.28915	-0.4718	ppb	0.28915 61.29%
P 214.914†	3.1	6.9653	µg/L	9.19417	6.9653	ppb	9.19417 132.00%
Pb 220.353†	3.8	1.1092	µg/L	0.81660	1.1092	ppb	0.81660 73.62%
S 181.975 Axial†	-0.4	-2.0527	µg/L	6.07256	-2.0527	ppb	6.07256 295.83%
Sb 206.836†	0.4	0.4479	µg/L	2.87819	0.4479	ppb	2.87819 642.65%
Se 196.026†	-1.7	-2.2699	µg/L	8.02231	-2.2699	ppb	8.02231 353.42%
SiO2†	110.4	23.310	µg/L	4.4245	23.310	ppb	4.4245 18.98%
Si 251.611†	173.1	14.520	µg/L	0.3441	14.520	ppb	0.3441 2.37%
Sn 189.927†	5.0	2.9472	µg/L	0.98632	2.9472	ppb	0.98632 33.47%
Sr 421.552†	20.3	0.1288	µg/L	0.15184	0.1288	ppb	0.15184 117.84%
Ti 334.940†	141.0	0.3479	µg/L	0.14215	0.3479	ppb	0.14215 40.86%
Tl 190.801†	3.6	6.1182	µg/L	4.49299	6.1182	ppb	4.49299 73.44%
U 409.014†	14.2	1.3360	µg/L	7.98748	1.3360	ppb	7.98748 597.86%
V 292.402†	10.1	0.1309	µg/L	0.18491	0.1309	ppb	0.18491 141.26%
Zn 213.857†	43.8	1.2663	µg/L	0.18639	1.2663	ppb	0.18639 14.72%

Sequence No.: 2
Sample ID: 1202011875|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 302
Date Collected: 1/27/2010 09:34:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011875|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77107.4	77107.4	100	%			09:34:44
1	Al 396.153Radial†	142607.1	142102.8	98728	µg/L	98728	ppb	09:34:38
1	Ca 317.933Radial†	148710.1	147903.5	116460	µg/L	116460	ppb	09:34:38
1	Fe 238.204 Radial†	14017.9	13949.8	200290	µg/L	200290	ppb	09:34:44
1	K 766.490 Radial†	68912.2	68243.0	45302	µg/L	45302	ppb	09:34:38
1	Mg 279.077 IEC†	3952.7	3929.7	42623	µg/L	42623	ppb	09:34:44
1	Na 589.592 Radial†	41497.3	40797.5	11716	µg/L	11716	ppb	09:34:38
1	Sr 421.552†	417451.7	415336.3	2639.0	µg/L	2639.0	ppb	09:34:38
1	Sc 361.383	1961360.5	1961360.5	100.92	%			09:35:20
1	Y 371.029	1263259.3	1263259.3	102.80	%			09:35:20
1	Ag 328.068†	34991.7	34726.2	345.42	µg/L	345.42	ppb	09:35:26
1	As 188.979†	535.8	530.3	1228.2	µg/L	1228.2	ppb	09:35:47
1	B 249.677†	38591.2	38122.5	1754.9	µg/L	1754.9	ppb	09:35:26
1	Ba 233.527†	75284.4	74609.3	2170.1	µg/L	2170.1	ppb	09:35:26
1	Be 313.107†	1337494.0	1321402.6	918.34	µg/L	918.34	ppb	09:35:20
1	Cd 226.502†	25490.1	25392.0	726.52	µg/L	726.52	ppb	09:35:26
1	Co 228.616†	20624.7	20480.8	1118.4	µg/L	1118.4	ppb	09:35:26
1	Cr 267.716†	128828.7	127731.4	2963.5	µg/L	2963.5	ppb	09:35:26
1	Cu 324.752†	291250.9	284914.7	2170.1	µg/L	2170.1	ppb	09:35:26
1	Mn 257.610†	1678631.6	1663444.2	6170.1	µg/L	6170.1	ppb	09:35:20
1	Mo 202.031†	4889.5	4827.5	613.96	µg/L	613.96	ppb	09:35:47
1	Ni 231.604†	27322.0	26736.3	1685.8	µg/L	1685.8	ppb	09:35:26
1	P 214.914†	4194.9	3954.0	9122.7	µg/L	9122.7	ppb	09:35:47
1	Pb 220.353†	3467.8	3380.1	981.76	µg/L	981.76	ppb	09:35:47
1	S 181.975 Axial†	861.8	828.4	4748.7	µg/L	4748.7	ppb	09:35:47
1	Sb 206.836†	1388.6	1353.5	1466.9	µg/L	1466.9	ppb	09:35:47
1	Se 196.026†	1808.4	1779.4	3589.1	µg/L	3589.1	ppb	09:35:47
1	SiO2†	445067.7	438711.9	92600	µg/L	92600	ppb	09:35:20
1	Si 251.611†	515091.2	510068.3	42783	µg/L	42783	ppb	09:35:20
1	Sn 189.927†	1961.8	1920.4	1173.0	µg/L	1173.0	ppb	09:35:47
1	Ti 334.940†	2436697.8	2413603.1	6018.0	µg/L	6018.0	ppb	09:35:20
1	Tl 190.801†	793.4	809.2	1440.1	µg/L	1440.1	ppb	09:35:47
1	U 409.014†	-1177.1	-933.4	-124.01	µg/L	-124.01	ppb	09:35:26
1	V 292.402†	111802.2	110900.2	1401.0	µg/L	1401.0	ppb	09:35:26
1	Zn 213.857†	236368.7	233532.1	6785.4	µg/L	6785.4	ppb	09:35:26
2	Sc RADIAL	77280.7	77280.7	101	%			09:34:55
2	Al 396.153Radial†	142758.7	141935.0	98611	µg/L	98611	ppb	09:34:50
2	Ca 317.933Radial†	148533.5	147395.8	116060	µg/L	116060	ppb	09:34:50
2	Fe 238.204 Radial†	14061.3	13961.5	200460	µg/L	200460	ppb	09:34:55
2	K 766.490 Radial†	68798.7	67976.3	45125	µg/L	45125	ppb	09:34:50
2	Mg 279.077 IEC†	3965.1	3933.2	42661	µg/L	42661	ppb	09:34:55
2	Na 589.592 Radial†	41431.9	40639.8	11670	µg/L	11670	ppb	09:34:50
2	Sr 421.552†	417170.0	414123.8	2631.3	µg/L	2631.3	ppb	09:34:50
2	Sc 361.383	1953883.2	1953883.2	100.54	%			09:35:54
2	Y 371.029	1259158.1	1259158.1	102.47	%			09:35:54
2	Ag 328.068†	35137.9	35004.3	348.11	µg/L	348.11	ppb	09:36:00
2	As 188.979†	547.6	544.1	1260.0	µg/L	1260.0	ppb	09:36:21
2	B 249.677†	38793.8	38470.4	1771.8	µg/L	1771.8	ppb	09:36:00
2	Ba 233.527†	75866.6	75473.8	2195.3	µg/L	2195.3	ppb	09:36:00
2	Be 313.107†	1341705.4	1330663.0	924.78	µg/L	924.78	ppb	09:35:54
2	Cd 226.502†	25610.7	25608.7	732.89	µg/L	732.89	ppb	09:36:00
2	Co 228.616†	20805.8	20739.1	1132.5	µg/L	1132.5	ppb	09:36:00
2	Cr 267.716†	129474.7	128862.4	2989.8	µg/L	2989.8	ppb	09:36:00
2	Cu 324.752†	293082.0	287840.4	2192.1	µg/L	2192.1	ppb	09:36:00
2	Mn 257.610†	1683878.0	1675027.7	6212.9	µg/L	6212.9	ppb	09:35:54
2	Mo 202.031†	4915.8	4872.2	619.58	µg/L	619.58	ppb	09:36:21
2	Ni 231.604†	27513.5	27030.3	1704.3	µg/L	1704.3	ppb	09:36:00
2	P 214.914†	4251.2	4025.9	9292.7	µg/L	9292.7	ppb	09:36:21
2	Pb 220.353†	3511.8	3437.0	998.33	µg/L	998.33	ppb	09:36:21

2	S 181.975 Axial†	872.6	842.4	4828.8 µg/L	4828.8 ppb	09:36:21
2	Sb 206.836†	1390.8	1360.9	1474.9 µg/L	1474.9 ppb	09:36:21
2	Se 196.026†	1824.8	1802.6	3626.2 µg/L	3626.2 ppb	09:36:21
2	SiO2†	446608.1	441931.7	93280 µg/L	93280 ppb	09:35:54
2	Si 251.611†	516688.7	513610.4	43080 µg/L	43080 ppb	09:35:54
2	Sn 189.927†	1999.7	1965.6	1199.3 µg/L	1199.3 ppb	09:36:21
2	Ti 334.940†	2444560.1	2430662.8	6060.5 µg/L	6060.5 ppb	09:35:54
2	Tl 190.801†	798.6	817.4	1454.7 µg/L	1454.7 ppb	09:36:21
2	U 409.014†	-1227.8	-988.3	-129.25 µg/L	-129.25 ppb	09:36:00
2	V 292.402†	112498.2	112016.4	1415.0 µg/L	1415.0 ppb	09:36:00
2	Zn 213.857†	237890.5	235942.1	6855.5 µg/L	6855.5 ppb	09:36:00
3	Sc RADIAL	77675.6	77675.6	101 %		09:35:07
3	Al 396.153Radial†	143478.4	141925.4	98604 µg/L	98604 ppb	09:35:01
3	Ca 317.933Radial†	149424.0	147525.9	116170 µg/L	116170 ppb	09:35:01
3	Fe 238.204 Radial†	14127.8	13956.3	200390 µg/L	200390 ppb	09:35:07
3	K 766.490 Radial†	69136.6	67962.8	45116 µg/L	45116 ppb	09:35:01
3	Mg 279.077 IEC†	3989.0	3936.8	42700 µg/L	42700 ppb	09:35:07
3	Na 589.592 Radial†	41714.6	40710.0	11690 µg/L	11690 ppb	09:35:01
3	Sr 421.552†	419528.2	414348.0	2632.7 µg/L	2632.7 ppb	09:35:01
3	Sc 361.383	1950630.4	1950630.4	100.37 %		09:36:28
3	Y 371.029	1259811.2	1259811.2	102.52 %		09:36:28
3	Ag 328.068†	34634.1	34560.7	343.84 µg/L	343.84 ppb	09:36:34
3	As 188.979†	538.6	536.0	1241.3 µg/L	1241.3 ppb	09:36:55
3	B 249.677†	38275.9	38018.7	1749.8 µg/L	1749.8 ppb	09:36:34
3	Ba 233.527†	74541.9	74279.9	2160.5 µg/L	2160.5 ppb	09:36:34
3	Be 313.107†	1329317.4	1320546.3	917.75 µg/L	917.75 ppb	09:36:28
3	Cd 226.502†	25191.7	25233.7	721.83 µg/L	721.83 ppb	09:36:34
3	Co 228.616†	20411.6	20380.9	1112.9 µg/L	1112.9 ppb	09:36:34
3	Cr 267.716†	127350.6	126960.9	2945.7 µg/L	2945.7 ppb	09:36:34
3	Cu 324.752†	288318.0	283580.2	2160.0 µg/L	2160.0 ppb	09:36:34
3	Mn 257.610†	1669753.0	1663747.9	6171.2 µg/L	6171.2 ppb	09:36:28
3	Mo 202.031†	4859.5	4824.2	613.55 µg/L	613.55 ppb	09:36:55
3	Ni 231.604†	26976.9	26541.4	1673.5 µg/L	1673.5 ppb	09:36:34
3	P 214.914†	4211.9	3993.8	9219.2 µg/L	9219.2 ppb	09:36:55
3	Pb 220.353†	3460.9	3392.1	985.29 µg/L	985.29 ppb	09:36:55
3	S 181.975 Axial†	859.8	831.1	4764.0 µg/L	4764.0 ppb	09:36:55
3	Sb 206.836†	1382.0	1354.5	1468.2 µg/L	1468.2 ppb	09:36:55
3	Se 196.026†	1816.5	1797.3	3617.6 µg/L	3617.6 ppb	09:36:55
3	SiO2†	442379.2	438459.2	92547 µg/L	92547 ppb	09:36:28
3	Si 251.611†	512002.3	509798.3	42760 µg/L	42760 ppb	09:36:28
3	Sn 189.927†	1975.4	1944.6	1187.1 µg/L	1187.1 ppb	09:36:55
3	Ti 334.940†	2422889.8	2413127.5	6016.8 µg/L	6016.8 ppb	09:36:28
3	Tl 190.801†	803.0	823.1	1464.0 µg/L	1464.0 ppb	09:36:55
3	U 409.014†	-1213.1	-975.6	-128.04 µg/L	-128.04 ppb	09:36:34
3	V 292.402†	110706.0	110417.5	1395.0 µg/L	1395.0 ppb	09:36:34
3	Zn 213.857†	234028.5	232489.0	6755.1 µg/L	6755.1 ppb	09:36:34

Mean Data: 1202011875|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1955291.3	100.61	%	0.283				0.28%
Sc RADIAL	77354.6	101	%	0.4				0.38%
Y 371.029	1260742.9	102.60	%	0.179				0.17%
Ag 328.068†	34763.8	345.79	µg/L	2.160	345.79	ppb	2.160	0.62%
Al 396.153Radial†	141987.8	98648	µg/L	69.4	98648	ppb	69.4	0.07%
As 188.979†	536.8	1243.2	µg/L	15.99	1243.2	ppb	15.99	1.29%
B 249.677†	38203.9	1758.8	µg/L	11.51	1758.8	ppb	11.51	0.65%
Ba 233.527†	74787.7	2175.3	µg/L	17.93	2175.3	ppb	17.93	0.82%
Be 313.107†	1324204.0	920.29	µg/L	3.899	920.29	ppb	3.899	0.42%
Ca 317.933Radial†	147608.4	116230	µg/L	207.6	116230	ppb	207.6	0.18%
Cd 226.502†	25411.5	727.08	µg/L	5.551	727.08	ppb	5.551	0.76%
Co 228.616†	20533.6	1121.3	µg/L	10.15	1121.3	ppb	10.15	0.91%
Cr 267.716†	127851.6	2966.3	µg/L	22.19	2966.3	ppb	22.19	0.75%
Cu 324.752†	285445.1	2174.1	µg/L	16.39	2174.1	ppb	16.39	0.75%
Fe 238.204 Radial†	13955.8	200380	µg/L	84.6	200380	ppb	84.6	0.04%
K 766.490 Radial†	68060.7	45181	µg/L	104.9	45181	ppb	104.9	0.23%
Mg 279.077 IEC†	3933.2	42661	µg/L	38.7	42661	ppb	38.7	0.09%
Mn 257.610†	1667406.6	6184.7	µg/L	24.40	6184.7	ppb	24.40	0.39%
Mo 202.031†	4841.3	615.69	µg/L	3.370	615.69	ppb	3.370	0.55%
Na 589.592 Radial†	40715.8	11692	µg/L	22.7	11692	ppb	22.7	0.19%

Ni 231.604†	26769.4	1687.9	µg/L	15.50	1687.9	ppb	15.50	0.92%
P 214.914†	3991.2	9211.5	µg/L	85.29	9211.5	ppb	85.29	0.93%
Pb 220.353†	3403.1	988.46	µg/L	8.724	988.46	ppb	8.724	0.88%
S 181.975 Axial†	834.0	4780.5	µg/L	42.49	4780.5	ppb	42.49	0.89%
Sb 206.836†	1356.3	1470.0	µg/L	4.28	1470.0	ppb	4.28	0.29%
Se 196.026†	1793.1	3611.0	µg/L	19.43	3611.0	ppb	19.43	0.54%
SiO2†	439701.0	92809	µg/L	408.6	92809	ppb	408.6	0.44%
Si 251.611†	511159.0	42874	µg/L	178.4	42874	ppb	178.4	0.42%
Sn 189.927†	1943.5	1186.5	µg/L	13.15	1186.5	ppb	13.15	1.11%
Sr 421.552†	414602.7	2634.3	µg/L	4.10	2634.3	ppb	4.10	0.16%
Ti 334.940†	2419131.2	6031.7	µg/L	24.91	6031.7	ppb	24.91	0.41%
Tl 190.801†	816.6	1452.9	µg/L	12.05	1452.9	ppb	12.05	0.83%
U 409.014†	-965.8	-127.10	µg/L	2.742	-127.10	ppb	2.742	2.16%
V 292.402†	111111.4	1403.7	µg/L	10.28	1403.7	ppb	10.28	0.73%
Zn 213.857†	233987.7	6798.7	µg/L	51.54	6798.7	ppb	51.54	0.76%

Sequence No.: 4
Sample ID: 1202011876|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 304
Date Collected: 1/27/2010 09:40:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011876|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77216.0	77216.0	101	%			09:41:18
1	Al 396.153Radial†	39816.6	39640.3	27544	µg/L	27544	ppb	09:41:18
1	Ca 317.933Radial†	10714.3	10407.7	8195.2	µg/L	8195.2	ppb	09:41:38
1	Fe 238.204 Radial†	5959.2	5912.7	84886	µg/L	84886	ppb	09:41:38
1	K 766.490 Radial†	7193.0	6744.1	4477.0	µg/L	4477.0	ppb	09:41:18
1	Mg 279.077 IEC†	550.2	539.0	5783.7	µg/L	5783.7	ppb	09:41:38
1	Na 589.592 Radial†	3098.0	2537.2	728.59	µg/L	728.59	ppb	09:41:18
1	Sr 421.552†	10608.2	9996.1	63.514	µg/L	63.514	ppb	09:41:18
1	Sc 361.383	1965183.5	1965183.5	101.12	%			09:42:43
1	Y 371.029	1289947.6	1289947.6	104.98	%			09:42:43
1	Ag 328.068†	-775.2	-711.5	-0.6250	µg/L	-0.6250	ppb	09:42:48
1	As 188.979†	5.1	4.5	14.833	µg/L	14.833	ppb	09:43:09
1	B 249.677†	1219.9	1091.1	8.8423	µg/L	8.8423	ppb	09:42:48
1	Ba 233.527†	13148.9	13017.6	378.38	µg/L	378.38	ppb	09:42:48
1	Be 313.107†	10940.9	6980.2	4.0002	µg/L	4.0002	ppb	09:42:48
1	Cd 226.502†	258.6	391.2	1.9521	µg/L	1.9521	ppb	09:42:48
1	Co 228.616†	360.0	401.0	17.413	µg/L	17.413	ppb	09:43:09
1	Cr 267.716†	1344.8	1412.7	32.830	µg/L	32.830	ppb	09:42:48
1	Cu 324.752†	7589.5	3837.1	40.650	µg/L	40.650	ppb	09:42:48
1	Mn 257.610†	640765.7	633850.4	2352.7	µg/L	2352.7	ppb	09:42:43
1	Mo 202.031†	76.3	58.3	10.543	µg/L	10.543	ppb	09:43:09
1	Ni 231.604†	781.5	437.4	28.637	µg/L	28.637	ppb	09:43:09
1	P 214.914†	563.2	354.4	784.18	µg/L	784.18	ppb	09:43:09
1	Pb 220.353†	376.8	316.7	90.692	µg/L	90.692	ppb	09:43:09
1	S 181.975 Axial†	73.1	46.8	268.28	µg/L	268.28	ppb	09:43:09
1	Sb 206.836†	22.7	0.1	-0.7349	µg/L	-0.7349	ppb	09:43:09
1	Se 196.026†	-210.0	-220.1	-23.124	µg/L	-23.124	ppb	09:43:09
1	SiO2†	282694.4	277281.1	58527	µg/L	58527	ppb	09:42:43
1	Si 251.611†	325982.6	322063.6	27014	µg/L	27014	ppb	09:42:43
1	Sn 189.927†	-15.4	-38.6	-11.797	µg/L	-11.797	ppb	09:43:09
1	Ti 334.940†	919219.8	908253.9	2264.8	µg/L	2264.8	ppb	09:42:43
1	Tl 190.801†	-39.8	-16.2	-3.6367	µg/L	-3.6367	ppb	09:43:09
1	U 409.014†	-961.2	-717.6	-80.780	µg/L	-80.780	ppb	09:42:43
1	V 292.402†	8000.8	8034.2	104.46	µg/L	104.46	ppb	09:42:48
1	Zn 213.857†	14307.1	13477.1	388.37	µg/L	388.37	ppb	09:42:48
2	Sc RADIAL	77098.3	77098.3	100	%			09:41:44
2	Al 396.153Radial†	39877.1	39761.0	27628	µg/L	27628	ppb	09:41:44
2	Ca 317.933Radial†	10783.0	10492.4	8261.9	µg/L	8261.9	ppb	09:42:04
2	Fe 238.204 Radial†	5993.9	5956.4	85513	µg/L	85513	ppb	09:42:04
2	K 766.490 Radial†	7269.7	6831.5	4535.0	µg/L	4535.0	ppb	09:41:44
2	Mg 279.077 IEC†	542.7	532.5	5711.6	µg/L	5711.6	ppb	09:42:04
2	Na 589.592 Radial†	3147.4	2591.1	744.06	µg/L	744.06	ppb	09:41:44
2	Sr 421.552†	10572.8	9976.9	63.392	µg/L	63.392	ppb	09:41:44
2	Sc 361.383	1956988.4	1956988.4	100.70	%			09:43:17
2	Y 371.029	1283737.3	1283737.3	104.47	%			09:43:17
2	Ag 328.068†	-795.8	-735.2	-0.8055	µg/L	-0.8055	ppb	09:43:22
2	As 188.979†	1.2	0.6	5.9297	µg/L	5.9297	ppb	09:43:43
2	B 249.677†	1199.8	1076.3	7.7927	µg/L	7.7927	ppb	09:43:22
2	Ba 233.527†	13063.3	12987.1	377.50	µg/L	377.50	ppb	09:43:22
2	Be 313.107†	10860.0	6945.2	3.9724	µg/L	3.9724	ppb	09:43:22
2	Cd 226.502†	243.6	377.4	1.4737	µg/L	1.4737	ppb	09:43:22
2	Co 228.616†	370.9	413.3	18.073	µg/L	18.073	ppb	09:43:43
2	Cr 267.716†	1339.0	1412.5	32.826	µg/L	32.826	ppb	09:43:22
2	Cu 324.752†	7580.4	3859.5	40.905	µg/L	40.905	ppb	09:43:22
2	Mn 257.610†	640344.9	636086.1	2361.0	µg/L	2361.0	ppb	09:43:17
2	Mo 202.031†	76.1	58.4	10.581	µg/L	10.581	ppb	09:43:43
2	Ni 231.604†	790.0	449.1	29.382	µg/L	29.382	ppb	09:43:43
2	P 214.914†	568.2	361.7	801.20	µg/L	801.20	ppb	09:43:43
2	Pb 220.353†	391.9	333.3	95.508	µg/L	95.508	ppb	09:43:43

2	S 181.975 Axial†	69.1	43.1	247.20 µg/L	247.20 ppb		09:43:43
2	Sb 206.836†	25.1	2.5	1.9467 µg/L	1.9467 ppb		09:43:43
2	Se 196.026†	-206.4	-217.4	-16.373 µg/L	-16.373 ppb		09:43:43
2	SiO2†	282575.8	278334.0	58749 µg/L	58749 ppb		09:43:17
2	Si 251.611†	325847.9	323279.8	27116 µg/L	27116 ppb		09:43:17
2	Sn 189.927†	-11.8	-35.1	-9.7029 µg/L	-9.7029 ppb		09:43:43
2	Ti 334.940†	918983.5	911825.9	2273.7 µg/L	2273.7 ppb		09:43:17
2	Tl 190.801†	-31.8	-8.5	9.8192 µg/L	9.8192 ppb		09:43:43
2	U 409.014†	-1050.2	-809.9	-89.680 µg/L	-89.680 ppb		09:43:17
2	V 292.402†	7981.6	8048.3	104.66 µg/L	104.66 ppb		09:43:22
2	Zn 213.857†	14200.5	13430.5	386.98 µg/L	386.98 ppb		09:43:22
3	Sc RADIAL	77182.4	77182.4	100 %			09:42:10
3	Al 396.153Radial†	40568.4	40405.7	28076 µg/L	28076 ppb		09:42:10
3	Ca 317.933Radial†	10715.2	10413.2	8199.6 µg/L	8199.6 ppb		09:42:30
3	Fe 238.204 Radial†	5953.6	5909.7	84843 µg/L	84843 ppb		09:42:30
3	K 766.490 Radial†	7274.6	6828.4	4533.0 µg/L	4533.0 ppb		09:42:10
3	Mg 279.077 IEC†	543.1	532.3	5710.2 µg/L	5710.2 ppb		09:42:30
3	Na 589.592 Radial†	3173.6	2613.8	750.57 µg/L	750.57 ppb		09:42:10
3	Sr 421.552†	10734.2	10126.1	64.340 µg/L	64.340 ppb		09:42:10
3	Sc 361.383	1942880.1	1942880.1	99.974 %			09:43:51
3	Y 371.029	1274222.3	1274222.3	103.70 %			09:43:51
3	Ag 328.068†	-773.9	-719.0	-0.7127 µg/L	-0.7127 ppb		09:43:56
3	As 188.979†	3.8	3.3	12.063 µg/L	12.063 ppb		09:44:17
3	B 249.677†	1174.4	1059.5	7.3262 µg/L	7.3262 ppb		09:43:56
3	Ba 233.527†	12769.0	12786.9	371.68 µg/L	371.68 ppb		09:43:56
3	Be 313.107†	10661.5	6824.9	3.8963 µg/L	3.8963 ppb		09:43:56
3	Cd 226.502†	238.3	373.8	1.4409 µg/L	1.4409 ppb		09:43:56
3	Co 228.616†	335.9	381.0	16.330 µg/L	16.330 ppb		09:44:17
3	Cr 267.716†	1330.5	1413.6	32.849 µg/L	32.849 ppb		09:43:56
3	Cu 324.752†	7463.7	3797.4	40.346 µg/L	40.346 ppb		09:43:56
3	Mn 257.610†	631029.6	631385.9	2343.5 µg/L	2343.5 ppb		09:43:51
3	Mo 202.031†	73.0	55.8	10.234 µg/L	10.234 ppb		09:44:17
3	Ni 231.604†	737.8	402.6	26.444 µg/L	26.444 ppb		09:44:17
3	P 214.914†	543.3	341.0	752.24 µg/L	752.24 ppb		09:44:17
3	Pb 220.353†	371.0	315.2	90.280 µg/L	90.280 ppb		09:44:17
3	S 181.975 Axial†	66.9	41.4	237.40 µg/L	237.40 ppb		09:44:17
3	Sb 206.836†	30.1	7.7	7.6975 µg/L	7.6975 ppb		09:44:17
3	Se 196.026†	-185.1	-197.6	12.337 µg/L	12.337 ppb		09:44:17
3	SiO2†	279665.7	277460.9	58565 µg/L	58565 ppb		09:43:51
3	Si 251.611†	322410.5	322191.2	27024 µg/L	27024 ppb		09:43:51
3	Sn 189.927†	-17.4	-40.8	-13.080 µg/L	-13.080 ppb		09:44:17
3	Ti 334.940†	904161.8	903627.2	2253.3 µg/L	2253.3 ppb		09:43:51
3	Tl 190.801†	-33.6	-10.5	6.0981 µg/L	6.0981 ppb		09:44:17
3	U 409.014†	-1020.4	-787.7	-87.461 µg/L	-87.461 ppb		09:43:51
3	V 292.402†	7733.8	7857.9	102.26 µg/L	102.26 ppb		09:43:56
3	Zn 213.857†	13903.8	13236.2	381.36 µg/L	381.36 ppb		09:43:56

Mean Data: 1202011876|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1955017.4	100.60	%	0.581				0.58%
Sc RADIAL	77165.6	100	%	0.1				0.08%
Y 371.029	1282635.7	104.38	%	0.645				0.62%
Ag 328.068†	-721.9	-0.7144	µg/L	0.09023	-0.7144	ppb	0.09023	12.63%
Al 396.153Radial†	39935.6	27749	µg/L	286.0	27749	ppb	286.0	1.03%
As 188.979†	2.8	10.942	µg/L	4.5562	10.942	ppb	4.5562	41.64%
B 249.677†	1075.6	7.9870	µg/L	0.77652	7.9870	ppb	0.77652	9.72%
Ba 233.527†	12930.5	375.85	µg/L	3.643	375.85	ppb	3.643	0.97%
Be 313.107†	6916.7	3.9563	µg/L	0.05374	3.9563	ppb	0.05374	1.36%
Ca 317.933Radial†	10437.7	8218.9	µg/L	37.31	8218.9	ppb	37.31	0.45%
Cd 226.502†	380.8	1.6222	µg/L	0.28614	1.6222	ppb	0.28614	17.64%
Co 228.616†	398.4	17.272	µg/L	0.8800	17.272	ppb	0.8800	5.10%
Cr 267.716†	1412.9	32.835	µg/L	0.0124	32.835	ppb	0.0124	0.04%
Cu 324.752†	3831.4	40.634	µg/L	0.2803	40.634	ppb	0.2803	0.69%
Fe 238.204 Radial†	5926.3	85081	µg/L	374.9	85081	ppb	374.9	0.44%
K 766.490 Radial†	6801.3	4515.0	µg/L	32.93	4515.0	ppb	32.93	0.73%
Mg 279.077 IEC†	534.6	5735.2	µg/L	42.02	5735.2	ppb	42.02	0.73%
Mn 257.610†	633774.1	2352.4	µg/L	8.73	2352.4	ppb	8.73	0.37%
Mo 202.031†	57.5	10.453	µg/L	0.1905	10.453	ppb	0.1905	1.82%
Na 589.592 Radial†	2580.7	741.07	µg/L	11.294	741.07	ppb	11.294	1.52%

Ni 231.604†	429.7	28.154	µg/L	1.5268	28.154	ppb	1.5268	5.42%
P 214.914†	352.4	779.21	µg/L	24.858	779.21	ppb	24.858	3.19%
Pb 220.353†	321.7	92.160	µg/L	2.9069	92.160	ppb	2.9069	3.15%
S 181.975 Axial†	43.8	250.96	µg/L	15.781	250.96	ppb	15.781	6.29%
Sb 206.836†	3.4	2.9698	µg/L	4.30826	2.9698	ppb	4.30826	145.07%
Se 196.026†	-211.7	-9.0533	µg/L	18.82981	-9.0533	ppb	18.82981	207.99%
SiO2†	277692.0	58613	µg/L	118.9	58613	ppb	118.9	0.20%
Si 251.611†	322511.6	27051	µg/L	56.1	27051	ppb	56.1	0.21%
Sn 189.927†	-38.2	-11.527	µg/L	1.7046	-11.527	ppb	1.7046	14.79%
Sr 421.552†	10033.0	63.749	µg/L	0.5155	63.749	ppb	0.5155	0.81%
Ti 334.940†	907902.4	2264.0	µg/L	10.25	2264.0	ppb	10.25	0.45%
Tl 190.801†	-11.7	4.0935	µg/L	6.94829	4.0935	ppb	6.94829	169.74%
U 409.014†	-771.7	-85.974	µg/L	4.6329	-85.974	ppb	4.6329	5.39%
V 292.402†	7980.2	103.80	µg/L	1.334	103.80	ppb	1.334	1.28%
Zn 213.857†	13381.3	385.57	µg/L	3.711	385.57	ppb	3.711	0.96%

Sequence No.: 5
Sample ID: 1202011877|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 305
Date Collected: 1/27/2010 09:44:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011877|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77953.5	77953.5	101	%			09:44:59
1	Al 396.153Radial†	85859.3	84638.5	58801	µg/L	58801	ppb	09:44:59
1	Ca 317.933Radial†	18957.5	18430.1	14512	µg/L	14512	ppb	09:45:19
1	Fe 238.204 Radial†	6578.6	6467.0	92854	µg/L	92854	ppb	09:45:19
1	K 766.490 Radial†	18329.2	17650.6	11717	µg/L	11717	ppb	09:44:59
1	Mg 279.077 IEC†	1333.1	1305.5	14137	µg/L	14137	ppb	09:45:19
1	Na 589.592 Radial†	21964.1	21099.7	6059.1	µg/L	6059.1	ppb	09:44:59
1	Sr 421.552†	94066.4	92140.6	585.45	µg/L	585.45	ppb	09:44:59
1	Sc 361.383	1961985.7	1961985.7	100.96	%			09:46:26
1	Y 371.029	1300594.1	1300594.1	105.84	%			09:46:26
1	Ag 328.068†	55900.2	55425.6	526.58	µg/L	526.58	ppb	09:46:31
1	As 188.979†	242.1	239.3	555.76	µg/L	555.76	ppb	09:46:52
1	B 249.677†	12156.1	11925.7	532.65	µg/L	532.65	ppb	09:46:31
1	Ba 233.527†	35293.4	34973.5	1017.2	µg/L	1017.2	ppb	09:46:31
1	Be 313.107†	777907.1	766696.2	533.02	µg/L	533.02	ppb	09:46:26
1	Cd 226.502†	18275.6	18237.9	526.93	µg/L	526.93	ppb	09:46:31
1	Co 228.616†	9831.3	9783.1	534.13	µg/L	534.13	ppb	09:46:31
1	Cr 267.716†	24682.2	24531.1	569.37	µg/L	569.37	ppb	09:46:31
1	Cu 324.752†	81831.3	77387.7	594.77	µg/L	594.77	ppb	09:46:31
1	Mn 257.610†	856430.3	848504.2	3146.4	µg/L	3146.4	ppb	09:46:26
1	Mo 202.031†	4110.3	4054.1	512.73	µg/L	512.73	ppb	09:46:52
1	Ni 231.604†	9273.4	8850.1	558.17	µg/L	558.17	ppb	09:46:31
1	P 214.914†	888.2	677.3	1509.6	µg/L	1509.6	ppb	09:46:52
1	Pb 220.353†	2248.7	2171.5	633.01	µg/L	633.01	ppb	09:46:52
1	S 181.975 Axial†	1027.8	992.5	5689.5	µg/L	5689.5	ppb	09:46:52
1	Sb 206.836†	461.5	434.7	482.09	µg/L	482.09	ppb	09:46:52
1	Se 196.026†	128.8	115.2	535.23	µg/L	535.23	ppb	09:46:52
1	SiO2†	367102.3	361344.9	76270	µg/L	76270	ppb	09:46:26
1	Si 251.611†	423705.7	419386.1	35177	µg/L	35177	ppb	09:46:26
1	Sn 189.927†	938.6	906.3	543.49	µg/L	543.49	ppb	09:46:52
1	Ti 334.940†	1220742.6	1208401.1	3012.8	µg/L	3012.8	ppb	09:46:26
1	Tl 190.801†	275.6	296.0	541.99	µg/L	541.99	ppb	09:46:52
1	U 409.014†	4279.4	4471.8	412.95	µg/L	412.95	ppb	09:46:26
1	V 292.402†	50108.5	49755.8	629.31	µg/L	629.31	ppb	09:46:31
1	Zn 213.857†	33366.8	32379.3	935.35	µg/L	935.35	ppb	09:46:31
2	Sc RADIAL	78573.9	78573.9	102	%			09:45:25
2	Al 396.153Radial†	86265.3	84367.3	58612	µg/L	58612	ppb	09:45:25
2	Ca 317.933Radial†	18880.5	18207.4	14337	µg/L	14337	ppb	09:45:45
2	Fe 238.204 Radial†	6544.8	6382.8	91646	µg/L	91646	ppb	09:45:45
2	K 766.490 Radial†	18442.3	17618.5	11696	µg/L	11696	ppb	09:45:25
2	Mg 279.077 IEC†	1316.6	1278.9	13848	µg/L	13848	ppb	09:45:45
2	Na 589.592 Radial†	22095.1	21056.9	6046.8	µg/L	6046.8	ppb	09:45:25
2	Sr 421.552†	94447.9	91781.6	583.17	µg/L	583.17	ppb	09:45:25
2	Sc 361.383	1974407.3	1974407.3	101.60	%			09:47:00
2	Y 371.029	1309706.5	1309706.5	106.58	%			09:47:00
2	Ag 328.068†	55778.6	54957.5	522.10	µg/L	522.10	ppb	09:47:05
2	As 188.979†	243.0	238.6	554.24	µg/L	554.24	ppb	09:47:26
2	B 249.677†	12151.1	11845.1	529.35	µg/L	529.35	ppb	09:47:05
2	Ba 233.527†	35245.2	34706.1	1009.4	µg/L	1009.4	ppb	09:47:05
2	Be 313.107†	784657.4	768492.8	534.27	µg/L	534.27	ppb	09:47:00
2	Cd 226.502†	18212.9	18062.2	521.90	µg/L	521.90	ppb	09:47:05
2	Co 228.616†	9823.8	9714.5	530.32	µg/L	530.32	ppb	09:47:05
2	Cr 267.716†	24655.4	24350.9	565.19	µg/L	565.19	ppb	09:47:05
2	Cu 324.752†	81609.4	76659.3	589.13	µg/L	589.13	ppb	09:47:05
2	Mn 257.610†	863164.5	849795.6	3151.0	µg/L	3151.0	ppb	09:47:00
2	Mo 202.031†	4093.7	4012.2	507.42	µg/L	507.42	ppb	09:47:26
2	Ni 231.604†	9281.8	8800.6	555.04	µg/L	555.04	ppb	09:47:05
2	P 214.914†	883.0	666.7	1485.5	µg/L	1485.5	ppb	09:47:26
2	Pb 220.353†	2250.1	2158.9	629.34	µg/L	629.34	ppb	09:47:26

2	S 181.975 Axial†	1025.5	983.8	5639.7 µg/L	5639.7 ppb	09:47:26
2	Sb 206.836†	455.4	425.9	472.28 µg/L	472.28 ppb	09:47:26
2	Se 196.026†	136.1	121.5	540.73 µg/L	540.73 ppb	09:47:26
2	SiO2†	369797.1	361709.6	76347 µg/L	76347 ppb	09:47:00
2	Si 251.611†	427057.6	420045.0	35232 µg/L	35232 ppb	09:47:00
2	Sn 189.927†	930.8	892.8	535.40 µg/L	535.40 ppb	09:47:26
2	Ti 334.940†	1230370.3	1210270.3	3017.5 µg/L	3017.5 ppb	09:47:00
2	Tl 190.801†	272.8	291.5	534.42 µg/L	534.42 ppb	09:47:26
2	U 409.014†	4419.9	4583.5	423.78 µg/L	423.78 ppb	09:47:00
2	V 292.402†	49951.4	49289.0	623.40 µg/L	623.40 ppb	09:47:05
2	Zn 213.857†	33214.5	32021.5	925.01 µg/L	925.01 ppb	09:47:05
3	Sc RADIAL	77856.5	77856.5	101 %		09:45:51
3	Al 396.153Radial†	85863.1	84747.7	58877 µg/L	58877 ppb	09:45:51
3	Ca 317.933Radial†	18886.9	18383.7	14476 µg/L	14476 ppb	09:46:11
3	Fe 238.204 Radial†	6539.3	6436.4	92414 µg/L	92414 ppb	09:46:11
3	K 766.490 Radial†	18389.2	17732.3	11771 µg/L	11771 ppb	09:45:51
3	Mg 279.077 IEC†	1323.9	1298.0	14055 µg/L	14055 ppb	09:46:11
3	Na 589.592 Radial†	21973.9	21136.4	6069.6 µg/L	6069.6 ppb	09:45:51
3	Sr 421.552†	93904.7	92096.5	585.17 µg/L	585.17 ppb	09:45:51
3	Sc 361.383	1956344.3	1956344.3	100.67 %		09:47:34
3	Y 371.029	1296666.1	1296666.1	105.52 %		09:47:34
3	Ag 328.068†	54697.6	54390.6	516.72 µg/L	516.72 ppb	09:47:40
3	As 188.979†	223.0	221.0	513.59 µg/L	513.59 ppb	09:48:00
3	B 249.677†	11756.5	11563.5	515.21 µg/L	515.21 ppb	09:47:40
3	Ba 233.527†	33858.0	33648.4	978.66 µg/L	978.66 ppb	09:47:40
3	Be 313.107†	762625.0	753737.2	524.01 µg/L	524.01 ppb	09:47:34
3	Cd 226.502†	17606.9	17625.9	508.94 µg/L	508.94 ppb	09:47:40
3	Co 228.616†	9391.7	9374.6	511.66 µg/L	511.66 ppb	09:47:40
3	Cr 267.716†	23377.0	23305.1	540.92 µg/L	540.92 ppb	09:47:40
3	Cu 324.752†	78576.1	74387.7	572.16 µg/L	572.16 ppb	09:47:40
3	Mn 257.610†	840434.5	835060.5	3096.6 µg/L	3096.6 ppb	09:47:34
3	Mo 202.031†	3830.1	3787.5	479.23 µg/L	479.23 ppb	09:48:00
3	Ni 231.604†	8822.0	8428.2	531.61 µg/L	531.61 ppb	09:47:40
3	P 214.914†	850.9	642.8	1429.0 µg/L	1429.0 ppb	09:48:00
3	Pb 220.353†	2143.2	2073.1	604.26 µg/L	604.26 ppb	09:48:00
3	S 181.975 Axial†	987.4	955.4	5476.6 µg/L	5476.6 ppb	09:48:00
3	Sb 206.836†	434.0	408.7	453.08 µg/L	453.08 ppb	09:48:00
3	Se 196.026†	136.9	123.6	546.89 µg/L	546.89 ppb	09:48:00
3	SiO2†	360434.5	355769.7	75093 µg/L	75093 ppb	09:47:34
3	Si 251.611†	416152.6	413093.3	34649 µg/L	34649 ppb	09:47:34
3	Sn 189.927†	871.4	842.3	506.03 µg/L	506.03 ppb	09:48:00
3	Ti 334.940†	1196441.2	1187747.4	2961.3 µg/L	2961.3 ppb	09:47:34
3	Tl 190.801†	259.9	281.3	516.05 µg/L	516.05 ppb	09:48:00
3	U 409.014†	4333.7	4538.0	419.33 µg/L	419.33 ppb	09:47:34
3	V 292.402†	47655.0	47461.6	600.44 µg/L	600.44 ppb	09:47:40
3	Zn 213.857†	32031.3	31147.9	899.63 µg/L	899.63 ppb	09:47:40

Mean Data: 1202011877|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1964245.7	101.07	%	0.476				0.47%
Sc RADIAL	78127.9	102	%	0.5				0.50%
Y 371.029	1302322.2	105.98	%	0.544				0.51%
Ag 328.068†	54924.6	521.80	µg/L	4.939	521.80	ppb	4.939	0.95%
Al 396.153Radial†	84584.5	58763	µg/L	136.3	58763	ppb	136.3	0.23%
As 188.979†	233.0	541.20	µg/L	23.919	541.20	ppb	23.919	4.42%
B 249.677†	11778.1	525.73	µg/L	9.263	525.73	ppb	9.263	1.76%
Ba 233.527†	34442.6	1001.8	µg/L	20.39	1001.8	ppb	20.39	2.03%
Be 313.107†	762975.4	530.43	µg/L	5.597	530.43	ppb	5.597	1.06%
Ca 317.933Radial†	18340.4	14442	µg/L	92.6	14442	ppb	92.6	0.64%
Cd 226.502†	17975.3	519.26	µg/L	9.282	519.26	ppb	9.282	1.79%
Co 228.616†	9624.0	525.37	µg/L	12.027	525.37	ppb	12.027	2.29%
Cr 267.716†	24062.4	558.49	µg/L	15.364	558.49	ppb	15.364	2.75%
Cu 324.752†	76144.9	585.35	µg/L	11.772	585.35	ppb	11.772	2.01%
Fe 238.204 Radial†	6428.7	92305	µg/L	611.8	92305	ppb	611.8	0.66%
K 766.490 Radial†	17667.2	11728	µg/L	38.9	11728	ppb	38.9	0.33%
Mg 279.077 IEC†	1294.1	14013	µg/L	148.7	14013	ppb	148.7	1.06%
Mn 257.610†	844453.4	3131.3	µg/L	30.13	3131.3	ppb	30.13	0.96%
Mo 202.031†	3951.3	499.79	µg/L	18.005	499.79	ppb	18.005	3.60%
Na 589.592 Radial†	21097.7	6058.5	µg/L	11.42	6058.5	ppb	11.42	0.19%

Ni 231.604†	8693.0	548.27 µg/L	14.516	548.27 ppb	14.516	2.65%
P 214.914†	662.3	1474.7 µg/L	41.35	1474.7 ppb	41.35	2.80%
Pb 220.353†	2134.5	622.20 µg/L	15.647	622.20 ppb	15.647	2.51%
S 181.975 Axial†	977.3	5602.0 µg/L	111.36	5602.0 ppb	111.36	1.99%
Sb 206.836†	423.1	469.15 µg/L	14.754	469.15 ppb	14.754	3.14%
Se 196.026†	120.1	540.95 µg/L	5.834	540.95 ppb	5.834	1.08%
SiO2†	359608.1	75904 µg/L	702.7	75904 ppb	702.7	0.93%
Si 251.611†	417508.1	35019 µg/L	321.9	35019 ppb	321.9	0.92%
Sn 189.927†	880.5	528.31 µg/L	19.714	528.31 ppb	19.714	3.73%
Sr 421.552†	92006.3	584.60 µg/L	1.244	584.60 ppb	1.244	0.21%
Ti 334.940†	1202139.6	2997.2 µg/L	31.18	2997.2 ppb	31.18	1.04%
Tl 190.801†	289.6	530.82 µg/L	13.340	530.82 ppb	13.340	2.51%
U 409.014†	4531.1	418.68 µg/L	5.446	418.68 ppb	5.446	1.30%
V 292.402†	48835.5	617.72 µg/L	15.250	617.72 ppb	15.250	2.47%
Zn 213.857†	31849.5	920.00 µg/L	18.380	920.00 ppb	18.380	2.00%

Sequence No.: 6
Sample ID: 1202011879|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 306
Date Collected: 1/27/2010 09:48:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011879|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78091.9	78091.9	102	%			09:48:42
1	Al 396.153Radial†	80437.3	79154.9	54990	µg/L	54990	ppb	09:48:42
1	Ca 317.933Radial†	17833.9	17291.7	13616	µg/L	13616	ppb	09:49:02
1	Fe 238.204 Radial†	6509.4	6387.5	91712	µg/L	91712	ppb	09:49:02
1	K 766.490 Radial†	17720.5	17019.8	11298	µg/L	11298	ppb	09:48:42
1	Mg 279.077 IEC†	1209.8	1181.8	12790	µg/L	12790	ppb	09:49:02
1	Na 589.592 Radial†	21715.3	20816.6	5977.8	µg/L	5977.8	ppb	09:48:42
1	Sr 421.552†	92386.3	90323.6	573.91	µg/L	573.91	ppb	09:48:42
1	Sc 361.383	1973333.7	1973333.7	101.54	%			09:50:08
1	Y 371.029	1298751.4	1298751.4	105.69	%			09:50:08
1	Ag 328.068†	55796.7	55005.2	522.51	µg/L	522.51	ppb	09:50:14
1	As 188.979†	241.8	237.6	551.92	µg/L	551.92	ppb	09:50:34
1	B 249.677†	12072.5	11774.2	525.86	µg/L	525.86	ppb	09:50:14
1	Ba 233.527†	30858.4	30404.7	884.44	µg/L	884.44	ppb	09:50:14
1	Be 313.107†	781645.7	765947.0	532.60	µg/L	532.60	ppb	09:50:08
1	Cd 226.502†	18182.2	18041.8	521.28	µg/L	521.28	ppb	09:50:14
1	Co 228.616†	9705.5	9603.3	524.76	µg/L	524.76	ppb	09:50:14
1	Cr 267.716†	24621.5	24330.8	564.72	µg/L	564.72	ppb	09:50:14
1	Cu 324.752†	84491.8	79541.6	610.81	µg/L	610.81	ppb	09:50:14
1	Mn 257.610†	771968.5	760445.5	2820.9	µg/L	2820.9	ppb	09:50:08
1	Mo 202.031†	4087.9	4008.7	506.98	µg/L	506.98	ppb	09:50:34
1	Ni 231.604†	9186.2	8711.4	549.43	µg/L	549.43	ppb	09:50:14
1	P 214.914†	777.0	562.8	1233.4	µg/L	1233.4	ppb	09:50:34
1	Pb 220.353†	2216.7	2127.1	619.84	µg/L	619.84	ppb	09:50:34
1	S 181.975 Axial†	1039.0	997.7	5719.4	µg/L	5719.4	ppb	09:50:34
1	Sb 206.836†	465.5	436.0	483.55	µg/L	483.55	ppb	09:50:34
1	Se 196.026†	128.5	114.2	529.61	µg/L	529.61	ppb	09:50:34
1	SiO2†	351205.6	343598.3	72524	µg/L	72524	ppb	09:50:08
1	Si 251.611†	405732.9	399272.5	33490	µg/L	33490	ppb	09:50:08
1	Sn 189.927†	946.6	908.8	544.36	µg/L	544.36	ppb	09:50:34
1	Ti 334.940†	1117948.9	1100213.4	2743.1	µg/L	2743.1	ppb	09:50:08
1	Tl 190.801†	280.4	299.3	544.07	µg/L	544.07	ppb	09:50:34
1	U 409.014†	4521.1	4685.4	433.55	µg/L	433.55	ppb	09:50:08
1	V 292.402†	49329.1	48702.8	616.12	µg/L	616.12	ppb	09:50:14
1	Zn 213.857†	32422.3	31259.1	902.83	µg/L	902.83	ppb	09:50:14
2	Sc RADIAL	78222.9	78222.9	102	%			09:49:08
2	Al 396.153Radial†	80950.8	79526.6	55249	µg/L	55249	ppb	09:49:08
2	Ca 317.933Radial†	17866.3	17294.1	13618	µg/L	13618	ppb	09:49:29
2	Fe 238.204 Radial†	6506.1	6373.5	91512	µg/L	91512	ppb	09:49:29
2	K 766.490 Radial†	17767.9	17037.2	11310	µg/L	11310	ppb	09:49:08
2	Mg 279.077 IEC†	1208.0	1178.0	12749	µg/L	12749	ppb	09:49:29
2	Na 589.592 Radial†	21892.1	20954.5	6017.3	µg/L	6017.3	ppb	09:49:08
2	Sr 421.552†	92786.5	90564.4	575.44	µg/L	575.44	ppb	09:49:08
2	Sc 361.383	1952467.5	1952467.5	100.47	%			09:50:43
2	Y 371.029	1284925.1	1284925.1	104.57	%			09:50:43
2	Ag 328.068†	55837.9	55633.5	528.39	µg/L	528.39	ppb	09:50:48
2	As 188.979†	237.9	236.3	548.79	µg/L	548.79	ppb	09:51:09
2	B 249.677†	12144.9	11973.3	535.66	µg/L	535.66	ppb	09:50:48
2	Ba 233.527†	30916.3	30787.1	895.57	µg/L	895.57	ppb	09:50:48
2	Be 313.107†	774616.7	767177.4	533.45	µg/L	533.45	ppb	09:50:43
2	Cd 226.502†	18180.4	18231.4	526.89	µg/L	526.89	ppb	09:50:48
2	Co 228.616†	9733.7	9733.5	531.93	µg/L	531.93	ppb	09:50:48
2	Cr 267.716†	24593.5	24562.0	570.09	µg/L	570.09	ppb	09:50:48
2	Cu 324.752†	84542.3	80481.2	617.85	µg/L	617.85	ppb	09:50:48
2	Mn 257.610†	765668.3	762299.5	2827.8	µg/L	2827.8	ppb	09:50:43
2	Mo 202.031†	4075.5	4039.4	510.83	µg/L	510.83	ppb	09:51:09
2	Ni 231.604†	9173.2	8795.2	554.70	µg/L	554.70	ppb	09:50:48
2	P 214.914†	775.7	569.6	1249.4	µg/L	1249.4	ppb	09:51:09
2	Pb 220.353†	2205.5	2139.3	623.40	µg/L	623.40	ppb	09:51:09

2	S 181.975 Axial†	1042.3	1011.9	5800.7 µg/L	5800.7 ppb	09:51:09
2	Sb 206.836†	473.7	449.1	498.08 µg/L	498.08 ppb	09:51:09
2	Se 196.026†	131.4	118.3	535.43 µg/L	535.43 ppb	09:51:09
2	SiO2†	348311.4	344413.9	72696 µg/L	72696 ppb	09:50:43
2	Si 251.611†	402188.7	400015.1	33552 µg/L	33552 ppb	09:50:43
2	Sn 189.927†	944.9	917.1	549.21 µg/L	549.21 ppb	09:51:09
2	Ti 334.940†	1109041.8	1103114.1	2750.3 µg/L	2750.3 ppb	09:50:43
2	Tl 190.801†	267.8	289.6	527.49 µg/L	527.49 ppb	09:51:09
2	U 409.014†	4533.1	4745.0	439.26 µg/L	439.26 ppb	09:50:43
2	V 292.402†	49327.9	49220.8	622.60 µg/L	622.60 ppb	09:50:48
2	Zn 213.857†	32438.4	31616.3	913.23 µg/L	913.23 ppb	09:50:48
3	Sc RADIAL	78456.0	78456.0	102 %		09:49:34
3	Al 396.153Radial†	81131.8	79467.6	55208 µg/L	55208 ppb	09:49:34
3	Ca 317.933Radial†	17885.3	17260.6	13591 µg/L	13591 ppb	09:49:54
3	Fe 238.204 Radial†	6523.6	6371.7	91485 µg/L	91485 ppb	09:49:54
3	K 766.490 Radial†	17860.1	17075.6	11335 µg/L	11335 ppb	09:49:34
3	Mg 279.077 IEC†	1214.9	1181.2	12783 µg/L	12783 ppb	09:49:54
3	Na 589.592 Radial†	21990.2	20986.6	6026.6 µg/L	6026.6 ppb	09:49:34
3	Sr 421.552†	93224.8	90722.8	576.44 µg/L	576.44 ppb	09:49:34
3	Sc 361.383	1978592.8	1978592.8	101.81 %		09:51:17
3	Y 371.029	1300211.8	1300211.8	105.81 %		09:51:17
3	Ag 328.068†	55357.2	54427.5	516.98 µg/L	516.98 ppb	09:51:22
3	As 188.979†	230.7	226.1	525.34 µg/L	525.34 ppb	09:51:43
3	B 249.677†	11895.8	11569.0	515.96 µg/L	515.96 ppb	09:51:22
3	Ba 233.527†	30180.5	29658.1	862.72 µg/L	862.72 ppb	09:51:22
3	Be 313.107†	762938.9	745526.9	518.40 µg/L	518.40 ppb	09:51:17
3	Cd 226.502†	17823.6	17642.0	509.52 µg/L	509.52 ppb	09:51:22
3	Co 228.616†	9485.9	9362.2	511.59 µg/L	511.59 ppb	09:51:22
3	Cr 267.716†	23812.9	23472.1	544.79 µg/L	544.79 ppb	09:51:22
3	Cu 324.752†	82381.1	77247.3	593.53 µg/L	593.53 ppb	09:51:22
3	Mn 257.610†	754225.7	740997.6	2749.1 µg/L	2749.1 ppb	09:51:17
3	Mo 202.031†	3843.5	3757.9	475.48 µg/L	475.48 ppb	09:51:43
3	Ni 231.604†	8919.0	8424.9	531.39 µg/L	531.39 ppb	09:51:22
3	P 214.914†	745.6	529.8	1156.1 µg/L	1156.1 ppb	09:51:43
3	Pb 220.353†	2119.0	2025.4	590.13 µg/L	590.13 ppb	09:51:43
3	S 181.975 Axial†	998.6	955.3	5476.3 µg/L	5476.3 ppb	09:51:43
3	Sb 206.836†	439.2	409.0	453.39 µg/L	453.39 ppb	09:51:43
3	Se 196.026†	133.7	118.9	536.17 µg/L	536.17 ppb	09:51:43
3	SiO2†	343486.9	335097.6	70730 µg/L	70730 ppb	09:51:17
3	Si 251.611†	396539.4	389180.5	32643 µg/L	32643 ppb	09:51:17
3	Sn 189.927†	877.0	838.0	502.99 µg/L	502.99 ppb	09:51:43
3	Ti 334.940†	1088645.0	1068504.4	2664.0 µg/L	2664.0 ppb	09:51:17
3	Tl 190.801†	264.7	283.0	515.17 µg/L	515.17 ppb	09:51:43
3	U 409.014†	4427.6	4581.8	423.69 µg/L	423.69 ppb	09:51:17
3	V 292.402†	47902.0	47172.0	596.77 µg/L	596.77 ppb	09:51:22
3	Zn 213.857†	31722.0	30486.3	880.42 µg/L	880.42 ppb	09:51:22

Mean Data: 1202011879|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1968131.3	101.27	%	0.711				0.70%
Sc RADIAL	78256.9	102	%	0.2				0.24%
Y 371.029	1294629.4	105.36	%	0.687				0.65%
Ag 328.068†	55022.1	522.63	µg/L	5.706	522.63	ppb	5.706	1.09%
Al 396.153Radial†	79383.0	55149	µg/L	138.9	55149	ppb	138.9	0.25%
As 188.979†	233.3	542.02	µg/L	14.527	542.02	ppb	14.527	2.68%
B 249.677†	11772.1	525.83	µg/L	9.848	525.83	ppb	9.848	1.87%
Ba 233.527†	30283.3	880.91	µg/L	16.707	880.91	ppb	16.707	1.90%
Be 313.107†	759550.4	528.15	µg/L	8.454	528.15	ppb	8.454	1.60%
Ca 317.933Radial†	17282.2	13608	µg/L	14.7	13608	ppb	14.7	0.11%
Cd 226.502†	17971.7	519.23	µg/L	8.865	519.23	ppb	8.865	1.71%
Co 228.616†	9566.3	522.76	µg/L	10.318	522.76	ppb	10.318	1.97%
Cr 267.716†	24121.6	559.87	µg/L	13.328	559.87	ppb	13.328	2.38%
Cu 324.752†	79090.0	607.39	µg/L	12.514	607.39	ppb	12.514	2.06%
Fe 238.204 Radial†	6377.5	91570	µg/L	124.2	91570	ppb	124.2	0.14%
K 766.490 Radial†	17044.2	11315	µg/L	19.0	11315	ppb	19.0	0.17%
Mg 279.077 IEC†	1180.3	12774	µg/L	22.0	12774	ppb	22.0	0.17%
Mn 257.610†	754580.8	2799.3	µg/L	43.60	2799.3	ppb	43.60	1.56%
Mo 202.031†	3935.3	497.76	µg/L	19.394	497.76	ppb	19.394	3.90%
Na 589.592 Radial†	20919.2	6007.2	µg/L	25.94	6007.2	ppb	25.94	0.43%

Ni 231.604†	8643.8	545.17 µg/L	12.221	545.17 ppb	12.221	2.24%
P 214.914†	554.1	1213.0 µg/L	49.93	1213.0 ppb	49.93	4.12%
Pb 220.353†	2097.3	611.12 µg/L	18.269	611.12 ppb	18.269	2.99%
S 181.975 Axial†	988.3	5665.5 µg/L	168.76	5665.5 ppb	168.76	2.98%
Sb 206.836†	431.4	478.34 µg/L	22.793	478.34 ppb	22.793	4.76%
Se 196.026†	117.1	533.74 µg/L	3.594	533.74 ppb	3.594	0.67%
SiO2†	341036.6	71984 µg/L	1089.0	71984 ppb	1089.0	1.51%
Si 251.611†	396156.0	33228 µg/L	507.7	33228 ppb	507.7	1.53%
Sn 189.927†	888.0	532.19 µg/L	25.401	532.19 ppb	25.401	4.77%
Sr 421.552†	90536.9	575.26 µg/L	1.277	575.26 ppb	1.277	0.22%
Ti 334.940†	1090610.6	2719.2 µg/L	47.88	2719.2 ppb	47.88	1.76%
Tl 190.801†	290.6	528.91 µg/L	14.504	528.91 ppb	14.504	2.74%
U 409.014†	4670.8	432.17 µg/L	7.879	432.17 ppb	7.879	1.82%
V 292.402†	48365.2	611.83 µg/L	13.436	611.83 ppb	13.436	2.20%
Zn 213.857†	31120.6	898.83 µg/L	16.764	898.83 ppb	16.764	1.87%

Sequence No.: 7
Sample ID: 1202011878|940165|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 307
Date Collected: 1/27/2010 09:51:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011878|940165|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76469.4	76469.4	99.5	%			09:52:25
1	Al 396.153Radial†	8139.2	8204.4	5700.8	µg/L	5700.8	ppb	09:52:25
1	Ca 317.933Radial†	2199.3	1957.7	1541.5	µg/L	1541.5	ppb	09:52:45
1	Fe 238.204 Radial†	1278.5	1268.4	18210	µg/L	18210	ppb	09:52:45
1	K 766.490 Radial†	1855.9	1452.4	964.15	µg/L	964.15	ppb	09:52:25
1	Mg 279.077 IEC†	117.2	109.4	1173.2	µg/L	1173.2	ppb	09:52:45
1	Na 589.592 Radial†	964.6	424.1	121.78	µg/L	121.78	ppb	09:52:25
1	Sr 421.552†	2534.8	1988.7	12.636	µg/L	12.636	ppb	09:52:25
1	Sc 361.383	1964010.5	1964010.5	101.06	%			09:53:48
1	Y 371.029	1250563.5	1250563.5	101.77	%			09:53:48
1	Ag 328.068†	-162.7	-105.9	0.2951	µg/L	0.2951	ppb	09:53:54
1	As 188.979†	4.5	3.9	10.019	µg/L	10.019	ppb	09:54:14
1	B 249.677†	352.0	233.1	1.8490	µg/L	1.8490	ppb	09:53:54
1	Ba 233.527†	2648.4	2635.2	76.597	µg/L	76.597	ppb	09:53:54
1	Be 313.107†	5388.9	1492.9	0.8604	µg/L	0.8604	ppb	09:53:54
1	Cd 226.502†	-58.7	77.4	0.2248	µg/L	0.2248	ppb	09:54:14
1	Co 228.616†	36.9	81.5	3.5178	µg/L	3.5178	ppb	09:54:14
1	Cr 267.716†	208.1	288.7	6.7087	µg/L	6.7087	ppb	09:53:54
1	Cu 324.752†	4425.6	711.0	7.8769	µg/L	7.8769	ppb	09:53:54
1	Mn 257.610†	161703.4	160195.5	594.17	µg/L	594.17	ppb	09:53:48
1	Mo 202.031†	37.5	20.0	3.1990	µg/L	3.1990	ppb	09:54:14
1	Ni 231.604†	415.1	75.3	4.9783	µg/L	4.9783	ppb	09:54:14
1	P 214.914†	277.4	72.0	158.55	µg/L	158.55	ppb	09:54:14
1	Pb 220.353†	152.4	94.9	27.324	µg/L	27.324	ppb	09:54:14
1	S 181.975 Axial†	39.9	14.0	80.130	µg/L	80.130	ppb	09:54:14
1	Sb 206.836†	22.3	-0.3	-0.4776	µg/L	-0.4776	ppb	09:54:14
1	Se 196.026†	-32.0	-44.1	-0.0235	µg/L	-0.0235	ppb	09:54:14
1	SiO2†	61492.5	58568.2	12362	µg/L	12362	ppb	09:53:54
1	Si 251.611†	69547.9	68513.3	5746.7	µg/L	5746.7	ppb	09:53:54
1	Sn 189.927†	12.5	-11.0	-4.1983	µg/L	-4.1983	ppb	09:54:14
1	Ti 334.940†	191974.4	189185.5	471.75	µg/L	471.75	ppb	09:53:48
1	Tl 190.801†	-22.9	0.4	6.2099	µg/L	6.2099	ppb	09:54:14
1	U 409.014†	-483.1	-245.1	-26.013	µg/L	-26.013	ppb	09:53:54
1	V 292.402†	1544.0	1649.9	21.492	µg/L	21.492	ppb	09:53:54
1	Zn 213.857†	3485.1	2777.2	80.001	µg/L	80.001	ppb	09:53:54
2	Sc RADIAL	76474.0	76474.0	99.6	%			09:52:51
2	Al 396.153Radial†	8115.0	8179.7	5683.6	µg/L	5683.6	ppb	09:52:51
2	Ca 317.933Radial†	2202.0	1960.3	1543.6	µg/L	1543.6	ppb	09:53:11
2	Fe 238.204 Radial†	1284.5	1274.4	18296	µg/L	18296	ppb	09:53:11
2	K 766.490 Radial†	1842.4	1438.7	955.07	µg/L	955.07	ppb	09:52:51
2	Mg 279.077 IEC†	115.4	107.6	1152.9	µg/L	1152.9	ppb	09:53:11
2	Na 589.592 Radial†	981.0	440.5	126.49	µg/L	126.49	ppb	09:52:51
2	Sr 421.552†	2577.6	2031.6	12.908	µg/L	12.908	ppb	09:52:51
2	Sc 361.383	1961037.5	1961037.5	100.91	%			09:54:21
2	Y 371.029	1248362.4	1248362.4	101.59	%			09:54:21
2	Ag 328.068†	-218.0	-160.9	-0.2105	µg/L	-0.2105	ppb	09:54:27
2	As 188.979†	1.8	1.2	3.8353	µg/L	3.8353	ppb	09:54:47
2	B 249.677†	354.8	236.4	1.9645	µg/L	1.9645	ppb	09:54:27
2	Ba 233.527†	2630.1	2620.9	76.184	µg/L	76.184	ppb	09:54:27
2	Be 313.107†	5292.5	1405.4	0.7990	µg/L	0.7990	ppb	09:54:27
2	Cd 226.502†	-45.2	90.7	0.6070	µg/L	0.6070	ppb	09:54:47
2	Co 228.616†	28.7	73.5	3.0710	µg/L	3.0710	ppb	09:54:47
2	Cr 267.716†	197.9	278.9	6.4828	µg/L	6.4828	ppb	09:54:27
2	Cu 324.752†	4409.3	701.4	7.8167	µg/L	7.8167	ppb	09:54:27
2	Mn 257.610†	161764.9	160499.0	595.31	µg/L	595.31	ppb	09:54:21
2	Mo 202.031†	38.5	21.0	3.3338	µg/L	3.3338	ppb	09:54:47
2	Ni 231.604†	433.4	94.1	6.1593	µg/L	6.1593	ppb	09:54:47
2	P 214.914†	266.3	61.4	133.21	µg/L	133.21	ppb	09:54:47
2	Pb 220.353†	159.8	102.4	29.517	µg/L	29.517	ppb	09:54:47

2	S 181.975 Axial†	34.2	8.3	47.843	µg/L	47.843 ppb	09:54:47
2	Sb 206.836†	28.1	5.4	5.8794	µg/L	5.8794 ppb	09:54:47
2	Se 196.026†	-37.2	-49.3	-7.8784	µg/L	-7.8784 ppb	09:54:47
2	SiO2†	61355.7	58524.9	12353	µg/L	12353 ppb	09:54:27
2	Si 251.611†	69316.0	68387.9	5736.2	µg/L	5736.2 ppb	09:54:27
2	Sn 189.927†	17.4	-6.2	-1.3749	µg/L	-1.3749 ppb	09:54:47
2	Ti 334.940†	192076.3	189574.5	472.73	µg/L	472.73 ppb	09:54:21
2	Tl 190.801†	-17.2	6.0	15.902	µg/L	15.902 ppb	09:54:47
2	U 409.014†	-495.2	-257.8	-27.235	µg/L	-27.235 ppb	09:54:27
2	V 292.402†	1562.7	1670.8	21.755	µg/L	21.755 ppb	09:54:27
2	Zn 213.857†	3464.1	2761.6	79.539	µg/L	79.539 ppb	09:54:27
3	Sc RADIAL	76912.0	76912.0	100	%		09:53:17
3	Al 396.153Radial†	8203.4	8221.5	5712.7	µg/L	5712.7 ppb	09:53:17
3	Ca 317.933Radial†	2215.3	1961.0	1544.1	µg/L	1544.1 ppb	09:53:37
3	Fe 238.204 Radial†	1293.5	1276.1	18320	µg/L	18320 ppb	09:53:37
3	K 766.490 Radial†	1840.0	1425.8	946.50	µg/L	946.50 ppb	09:53:17
3	Mg 279.077 IEC†	118.4	109.9	1178.3	µg/L	1178.3 ppb	09:53:37
3	Na 589.592 Radial†	970.8	424.7	121.96	µg/L	121.96 ppb	09:53:17
3	Sr 421.552†	2552.7	1992.0	12.657	µg/L	12.657 ppb	09:53:17
3	Sc 361.383	1967815.8	1967815.8	101.26	%		09:54:54
3	Y 371.029	1252819.3	1252819.3	101.95	%		09:54:54
3	Ag 328.068†	-209.9	-152.2	-0.1410	µg/L	-0.1410 ppb	09:55:00
3	As 188.979†	-0.6	-1.1	-1.6567	µg/L	-1.6567 ppb	09:55:20
3	B 249.677†	335.7	216.3	0.9743	µg/L	0.9743 ppb	09:55:00
3	Ba 233.527†	2464.1	2448.1	71.157	µg/L	71.157 ppb	09:55:00
3	Be 313.107†	5144.9	1241.6	0.6919	µg/L	0.6919 ppb	09:55:00
3	Cd 226.502†	-52.0	84.1	0.4105	µg/L	0.4105 ppb	09:55:20
3	Co 228.616†	38.4	82.9	3.6305	µg/L	3.6305 ppb	09:55:20
3	Cr 267.716†	161.8	242.6	5.6382	µg/L	5.6382 ppb	09:55:00
3	Cu 324.752†	4385.2	662.6	7.5282	µg/L	7.5282 ppb	09:55:00
3	Mn 257.610†	156972.8	155214.1	575.79	µg/L	575.79 ppb	09:54:54
3	Mo 202.031†	33.5	15.9	2.6888	µg/L	2.6888 ppb	09:55:20
3	Ni 231.604†	407.2	66.8	4.4385	µg/L	4.4385 ppb	09:55:20
3	P 214.914†	265.9	60.1	130.00	µg/L	130.00 ppb	09:55:20
3	Pb 220.353†	144.9	87.2	25.072	µg/L	25.072 ppb	09:55:20
3	S 181.975 Axial†	28.7	2.9	16.343	µg/L	16.343 ppb	09:55:20
3	Sb 206.836†	26.4	3.7	3.9213	µg/L	3.9213 ppb	09:55:20
3	Se 196.026†	-17.4	-29.6	23.322	µg/L	23.322 ppb	09:55:20
3	SiO2†	57965.8	54967.6	11602	µg/L	11602 ppb	09:55:00
3	Si 251.611†	65465.3	64348.4	5397.3	µg/L	5397.3 ppb	09:55:00
3	Sn 189.927†	17.5	-6.2	-1.3440	µg/L	-1.3440 ppb	09:55:20
3	Ti 334.940†	185235.1	182162.6	454.24	µg/L	454.24 ppb	09:54:54
3	Tl 190.801†	-27.0	-3.6	-0.9100	µg/L	-0.9100 ppb	09:55:20
3	U 409.014†	-443.5	-205.1	-22.209	µg/L	-22.209 ppb	09:55:00
3	V 292.402†	1399.3	1504.1	19.682	µg/L	19.682 ppb	09:55:00
3	Zn 213.857†	3272.2	2560.3	73.675	µg/L	73.675 ppb	09:55:00

Mean Data: 1202011878|940165|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1964287.9	101.08	%	0.175				0.17%
Sc RADIAL	76618.5	99.7	%	0.33				0.33%
Y 371.029	1250581.7	101.77	%	0.181				0.18%
Ag 328.068†	-139.7	-0.0188	µg/L	0.27408	-0.0188	ppb	0.27408	>999.9%
Al 396.153Radial†	8201.9	5699.0	µg/L	14.63	5699.0	ppb	14.63	0.26%
As 188.979†	1.3	4.0660	µg/L	5.84153	4.0660	ppb	5.84153	143.67%
B 249.677†	228.6	1.5959	µg/L	0.54143	1.5959	ppb	0.54143	33.93%
Ba 233.527†	2568.1	74.646	µg/L	3.0283	74.646	ppb	3.0283	4.06%
Be 313.107†	1380.0	0.7838	µg/L	0.08525	0.7838	ppb	0.08525	10.88%
Ca 317.933Radial†	1959.7	1543.1	µg/L	1.38	1543.1	ppb	1.38	0.09%
Cd 226.502†	84.1	0.4141	µg/L	0.19112	0.4141	ppb	0.19112	46.15%
Co 228.616†	79.3	3.4064	µg/L	0.29592	3.4064	ppb	0.29592	8.69%
Cr 267.716†	270.1	6.2766	µg/L	0.56427	6.2766	ppb	0.56427	8.99%
Cu 324.752†	691.6	7.7406	µg/L	0.18638	7.7406	ppb	0.18638	2.41%
Fe 238.204 Radial†	1273.0	18275	µg/L	57.6	18275	ppb	57.6	0.32%
K 766.490 Radial†	1439.0	955.24	µg/L	8.827	955.24	ppb	8.827	0.92%
Mg 279.077 IEC†	109.0	1168.1	µg/L	13.42	1168.1	ppb	13.42	1.15%
Mn 257.610†	158636.2	588.42	µg/L	10.958	588.42	ppb	10.958	1.86%
Mo 202.031†	18.9	3.0739	µg/L	0.34025	3.0739	ppb	0.34025	11.07%
Na 589.592 Radial†	429.8	123.41	µg/L	2.665	123.41	ppb	2.665	2.16%

Ni 231.604†	78.7	5.1920	µg/L	0.88010	5.1920	ppb	0.88010	16.95%
P 214.914†	64.5	140.59	µg/L	15.637	140.59	ppb	15.637	11.12%
Pb 220.353†	94.9	27.304	µg/L	2.2226	27.304	ppb	2.2226	8.14%
S 181.975 Axial†	8.4	48.106	µg/L	31.8945	48.106	ppb	31.8945	66.30%
Sb 206.836†	2.9	3.1077	µg/L	3.25564	3.1077	ppb	3.25564	104.76%
Se 196.026†	-41.0	5.1401	µg/L	16.22858	5.1401	ppb	16.22858	315.72%
SiO2†	57353.6	12106	µg/L	436.2	12106	ppb	436.2	3.60%
Si 251.611†	67083.2	5626.7	µg/L	198.72	5626.7	ppb	198.72	3.53%
Sn 189.927†	-7.8	-2.3057	µg/L	1.63909	-2.3057	ppb	1.63909	71.09%
Sr 421.552†	2004.1	12.734	µg/L	0.1515	12.734	ppb	0.1515	1.19%
Ti 334.940†	186974.2	466.24	µg/L	10.404	466.24	ppb	10.404	2.23%
Tl 190.801†	1.0	7.0673	µg/L	8.43870	7.0673	ppb	8.43870	119.40%
U 409.014†	-236.0	-25.152	µg/L	2.6208	-25.152	ppb	2.6208	10.42%
V 292.402†	1608.3	20.976	µg/L	1.1286	20.976	ppb	1.1286	5.38%
Zn 213.857†	2699.7	77.739	µg/L	3.5264	77.739	ppb	3.5264	4.54%

Sequence No.: 8
Sample ID: 244228001|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 308
Date Collected: 1/27/2010 09:55:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228001|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76541.5	76541.5	99.6	%			09:56:02
1	Al 396.153Radial†	68667.6	68945.2	47906	µg/L	47906	ppb	09:56:02
1	Ca 317.933Radial†	18839.5	18656.3	14690	µg/L	14690	ppb	09:56:02
1	Fe 238.204 Radial†	7217.9	7228.3	103770	µg/L	103770	ppb	09:56:23
1	K 766.490 Radial†	13066.3	12701.8	8431.9	µg/L	8431.9	ppb	09:56:02
1	Mg 279.077 IEC†	981.9	977.2	10538	µg/L	10538	ppb	09:56:23
1	Na 589.592 Radial†	2738.4	2203.5	632.76	µg/L	632.76	ppb	09:56:02
1	Sr 421.552†	16332.6	15834.3	100.61	µg/L	100.61	ppb	09:56:02
1	Sc 361.383	1979760.0	1979760.0	101.87	%			09:57:28
1	Y 371.029	1294731.6	1294731.6	105.37	%			09:57:28
1	Ag 328.068†	-992.0	-918.7	-1.3703	µg/L	-1.3703	ppb	09:57:34
1	As 188.979†	11.8	11.0	30.708	µg/L	30.708	ppb	09:57:54
1	B 249.677†	1557.8	1413.9	14.853	µg/L	14.853	ppb	09:57:34
1	Ba 233.527†	22468.2	22070.0	641.38	µg/L	641.38	ppb	09:57:34
1	Be 313.107†	16349.9	12210.2	7.1136	µg/L	7.1136	ppb	09:57:34
1	Cd 226.502†	338.6	467.8	2.1278	µg/L	2.1278	ppb	09:57:54
1	Co 228.616†	497.6	533.5	21.818	µg/L	21.818	ppb	09:57:54
1	Cr 267.716†	5778.7	5755.3	133.55	µg/L	133.55	ppb	09:57:34
1	Cu 324.752†	8374.4	4552.4	48.653	µg/L	48.653	ppb	09:57:34
1	Mn 257.610†	801663.4	787127.1	2921.2	µg/L	2921.2	ppb	09:57:28
1	Mo 202.031†	79.0	60.4	11.527	µg/L	11.527	ppb	09:57:54
1	Ni 231.604†	1674.3	1308.1	83.731	µg/L	83.731	ppb	09:57:54
1	P 214.914†	652.6	438.1	974.32	µg/L	974.32	ppb	09:57:54
1	Pb 220.353†	402.0	338.7	97.505	µg/L	97.505	ppb	09:57:54
1	S 181.975 Axial†	97.6	70.3	403.14	µg/L	403.14	ppb	09:57:54
1	Sb 206.836†	33.5	10.5	9.3012	µg/L	9.3012	ppb	09:57:54
1	Se 196.026†	-254.8	-262.5	-18.160	µg/L	-18.160	ppb	09:57:54
1	SiO2†	391151.5	381687.7	80564	µg/L	80564	ppb	09:57:28
1	Si 251.611†	451458.1	442860.8	37146	µg/L	37146	ppb	09:57:28
1	Sn 189.927†	-43.7	-66.3	-23.867	µg/L	-23.867	ppb	09:57:54
1	Ti 334.940†	1494683.4	1466453.9	3656.7	µg/L	3656.7	ppb	09:57:28
1	Tl 190.801†	-38.4	-14.7	11.829	µg/L	11.829	ppb	09:57:54
1	U 409.014†	-958.1	-707.5	-82.837	µg/L	-82.837	ppb	09:57:28
1	V 292.402†	8021.4	7996.2	105.23	µg/L	105.23	ppb	09:57:34
1	Zn 213.857†	15412.6	14458.2	415.55	µg/L	415.55	ppb	09:57:34
2	Sc RADIAL	77819.1	77819.1	101	%			09:56:28
2	Al 396.153Radial†	69716.4	68849.0	47840	µg/L	47840	ppb	09:56:28
2	Ca 317.933Radial†	19145.2	18647.6	14684	µg/L	14684	ppb	09:56:28
2	Fe 238.204 Radial†	7242.9	7134.1	102420	µg/L	102420	ppb	09:56:49
2	K 766.490 Radial†	13269.0	12686.6	8421.9	µg/L	8421.9	ppb	09:56:28
2	Mg 279.077 IEC†	980.9	960.0	10353	µg/L	10353	ppb	09:56:49
2	Na 589.592 Radial†	2805.1	2224.2	638.70	µg/L	638.70	ppb	09:56:28
2	Sr 421.552†	16587.7	15816.9	100.50	µg/L	100.50	ppb	09:56:28
2	Sc 361.383	1980051.4	1980051.4	101.89	%			09:58:02
2	Y 371.029	1294400.2	1294400.2	105.34	%			09:58:02
2	Ag 328.068†	-991.0	-917.6	-1.4401	µg/L	-1.4401	ppb	09:58:08
2	As 188.979†	8.1	7.4	22.167	µg/L	22.167	ppb	09:58:28
2	B 249.677†	1554.4	1410.4	15.389	µg/L	15.389	ppb	09:58:08
2	Ba 233.527†	22588.7	22185.1	644.73	µg/L	644.73	ppb	09:58:08
2	Be 313.107†	16387.0	12244.2	7.1428	µg/L	7.1428	ppb	09:58:08
2	Cd 226.502†	335.0	464.2	2.1755	µg/L	2.1755	ppb	09:58:28
2	Co 228.616†	494.5	530.4	21.677	µg/L	21.677	ppb	09:58:28
2	Cr 267.716†	5814.7	5789.8	134.36	µg/L	134.36	ppb	09:58:08
2	Cu 324.752†	8383.3	4559.9	48.521	µg/L	48.521	ppb	09:58:08
2	Mn 257.610†	799410.8	784800.5	2912.4	µg/L	2912.4	ppb	09:58:02
2	Mo 202.031†	79.0	60.4	11.475	µg/L	11.475	ppb	09:58:28
2	Ni 231.604†	1683.2	1316.6	84.252	µg/L	84.252	ppb	09:58:28
2	P 214.914†	665.9	451.0	1006.3	µg/L	1006.3	ppb	09:58:28
2	Pb 220.353†	413.0	349.4	100.67	µg/L	100.67	ppb	09:58:28

2	S 181.975 Axial†	99.8	72.5	415.42 µg/L	415.42 ppb	09:58:28
2	Sb 206.836†	27.2	4.3	2.3517 µg/L	2.3517 ppb	09:58:28
2	Se 196.026†	-267.8	-275.3	-43.379 µg/L	-43.379 ppb	09:58:28
2	SiO2†	389573.7	380082.5	80225 µg/L	80225 ppb	09:58:02
2	Si 251.611†	449741.4	441110.6	36999 µg/L	36999 ppb	09:58:02
2	Sn 189.927†	-43.0	-65.7	-23.666 µg/L	-23.666 ppb	09:58:28
2	Ti 334.940†	1488976.5	1460636.7	3642.2 µg/L	3642.2 ppb	09:58:02
2	Tl 190.801†	-44.3	-20.4	1.7810 µg/L	1.7810 ppb	09:58:28
2	U 409.014†	-849.6	-600.9	-72.479 µg/L	-72.479 ppb	09:58:02
2	V 292.402†	8079.9	8052.5	105.87 µg/L	105.87 ppb	09:58:08
2	Zn 213.857†	15524.5	14565.8	418.76 µg/L	418.76 ppb	09:58:08
3	Sc RADIAL	77397.0	77397.0	101 %		09:56:54
3	Al 396.153Radial†	69382.3	68892.8	47870 µg/L	47870 ppb	09:56:54
3	Ca 317.933Radial†	18947.3	18554.3	14610 µg/L	14610 ppb	09:56:54
3	Fe 238.204 Radial†	7251.2	7181.2	103100 µg/L	103100 ppb	09:57:15
3	K 766.490 Radial†	13206.4	12695.9	8428.0 µg/L	8428.0 ppb	09:56:54
3	Mg 279.077 IEC†	986.0	970.3	10465 µg/L	10465 ppb	09:57:15
3	Na 589.592 Radial†	2791.0	2225.3	639.02 µg/L	639.02 ppb	09:56:54
3	Sr 421.552†	16489.1	15808.5	100.45 µg/L	100.45 ppb	09:56:54
3	Sc 361.383	1971770.8	1971770.8	101.46 %		09:58:36
3	Y 371.029	1288273.5	1288273.5	104.84 %		09:58:36
3	Ag 328.068†	-949.1	-880.3	-1.0739 µg/L	-1.0739 ppb	09:58:41
3	As 188.979†	6.4	5.7	18.382 µg/L	18.382 ppb	09:59:02
3	B 249.677†	1490.9	1354.2	12.294 µg/L	12.294 ppb	09:58:41
3	Ba 233.527†	21857.6	21557.6	626.49 µg/L	626.49 ppb	09:58:41
3	Be 313.107†	15893.4	11825.3	6.8724 µg/L	6.8724 ppb	09:58:41
3	Cd 226.502†	298.6	429.8	1.0770 µg/L	1.0770 ppb	09:59:02
3	Co 228.616†	462.2	500.6	20.152 µg/L	20.152 ppb	09:59:02
3	Cr 267.716†	5576.1	5578.6	129.45 µg/L	129.45 ppb	09:58:41
3	Cu 324.752†	8169.6	4383.8	47.292 µg/L	47.292 ppb	09:58:41
3	Mn 257.610†	785823.7	774704.0	2875.2 µg/L	2875.2 ppb	09:58:36
3	Mo 202.031†	85.6	67.2	12.360 µg/L	12.360 ppb	09:59:02
3	Ni 231.604†	1569.5	1211.5	77.637 µg/L	77.637 ppb	09:59:02
3	P 214.914†	624.4	412.9	914.67 µg/L	914.67 ppb	09:59:02
3	Pb 220.353†	383.9	322.4	92.774 µg/L	92.774 ppb	09:59:02
3	S 181.975 Axial†	93.0	66.1	378.97 µg/L	378.97 ppb	09:59:02
3	Sb 206.836†	31.6	8.8	7.4387 µg/L	7.4387 ppb	09:59:02
3	Se 196.026†	-237.7	-246.7	4.3402 µg/L	4.3402 ppb	09:59:02
3	SiO2†	384678.2	376863.3	79546 µg/L	79546 ppb	09:58:36
3	Si 251.611†	444157.1	437460.4	36693 µg/L	36693 ppb	09:58:36
3	Sn 189.927†	-40.3	-63.1	-22.101 µg/L	-22.101 ppb	09:59:02
3	Ti 334.940†	1459796.9	1438014.4	3585.8 µg/L	3585.8 ppb	09:58:36
3	Tl 190.801†	-36.2	-12.6	14.596 µg/L	14.596 ppb	09:59:02
3	U 409.014†	-843.2	-598.1	-72.293 µg/L	-72.293 ppb	09:58:36
3	V 292.402†	7752.2	7762.8	102.30 µg/L	102.30 ppb	09:58:41
3	Zn 213.857†	15004.0	14116.8	405.66 µg/L	405.66 ppb	09:58:41

Mean Data: 244228001|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1977194.1	101.74	%	0.242				0.24%
Sc RADIAL	77252.5	101	%	0.8				0.84%
Y 371.029	1292468.5	105.18	%	0.296				0.28%
Ag 328.068†	-905.5	-1.2948	µg/L	0.19444	-1.2948	ppb	0.19444	15.02%
Al 396.153Radial†	68895.6	47872	µg/L	33.5	47872	ppb	33.5	0.07%
As 188.979†	8.0	23.752	µg/L	6.3138	23.752	ppb	6.3138	26.58%
B 249.677†	1392.9	14.179	µg/L	1.6538	14.179	ppb	1.6538	11.66%
Ba 233.527†	21937.6	637.53	µg/L	9.709	637.53	ppb	9.709	1.52%
Be 313.107†	12093.2	7.0429	µg/L	0.14839	7.0429	ppb	0.14839	2.11%
Ca 317.933Radial†	18619.4	14661	µg/L	44.5	14661	ppb	44.5	0.30%
Cd 226.502†	453.9	1.7934	µg/L	0.62090	1.7934	ppb	0.62090	34.62%
Co 228.616†	521.5	21.216	µg/L	0.9240	21.216	ppb	0.9240	4.36%
Cr 267.716†	5707.9	132.45	µg/L	2.629	132.45	ppb	2.629	1.99%
Cu 324.752†	4498.7	48.155	µg/L	0.7508	48.155	ppb	0.7508	1.56%
Fe 238.204 Radial†	7181.2	103100	µg/L	676.3	103100	ppb	676.3	0.66%
K 766.490 Radial†	12694.8	8427.3	µg/L	5.06	8427.3	ppb	5.06	0.06%
Mg 279.077 IEC†	969.2	10452	µg/L	93.4	10452	ppb	93.4	0.89%
Mn 257.610†	782210.5	2903.0	µg/L	24.41	2903.0	ppb	24.41	0.84%
Mo 202.031†	62.7	11.787	µg/L	0.4967	11.787	ppb	0.4967	4.21%
Na 589.592 Radial†	2217.6	636.83	µg/L	3.529	636.83	ppb	3.529	0.55%

Ni 231.604†	1278.7	81.873	µg/L	3.6777	81.873	ppb	3.6777	4.49%
P 214.914†	434.0	965.10	µg/L	46.502	965.10	ppb	46.502	4.82%
Pb 220.353†	336.9	96.983	µg/L	3.9734	96.983	ppb	3.9734	4.10%
S 181.975 Axial†	69.6	399.17	µg/L	18.548	399.17	ppb	18.548	4.65%
Sb 206.836†	7.9	6.3639	µg/L	3.59726	6.3639	ppb	3.59726	56.53%
Se 196.026†	-261.5	-19.066	µg/L	23.8723	-19.066	ppb	23.8723	125.21%
SiO2†	379544.5	80112	µg/L	518.6	80112	ppb	518.6	0.65%
Si 251.611†	440477.3	36946	µg/L	231.1	36946	ppb	231.1	0.63%
Sn 189.927†	-65.0	-23.211	µg/L	0.9666	-23.211	ppb	0.9666	4.16%
Sr 421.552†	15819.9	100.52	µg/L	0.084	100.52	ppb	0.084	0.08%
Ti 334.940†	1455035.0	3628.2	µg/L	37.47	3628.2	ppb	37.47	1.03%
Tl 190.801†	-15.9	9.4021	µg/L	6.74351	9.4021	ppb	6.74351	71.72%
U 409.014†	-635.5	-75.869	µg/L	6.0345	-75.869	ppb	6.0345	7.95%
V 292.402†	7937.1	104.46	µg/L	1.904	104.46	ppb	1.904	1.82%
Zn 213.857†	14380.2	413.33	µg/L	6.827	413.33	ppb	6.827	1.65%

Sequence No.: 9
Sample ID: 244228002|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 309
Date Collected: 1/27/2010 09:59:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228002|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77325.4	77325.4	101	%			09:59:44
1	Al 396.153Radial†	55688.4	55352.2	38461	µg/L	38461	ppb	09:59:44
1	Ca 317.933Radial†	14691.6	14343.9	11295	µg/L	11295	ppb	10:00:04
1	Fe 238.204 Radial†	6128.7	6072.7	87183	µg/L	87183	ppb	10:00:04
1	K 766.490 Radial†	10551.7	10070.7	6685.3	µg/L	6685.3	ppb	09:59:44
1	Mg 279.077 IEC†	773.6	760.2	8191.5	µg/L	8191.5	ppb	10:00:04
1	Na 589.592 Radial†	2836.5	2273.0	652.73	µg/L	652.73	ppb	09:59:44
1	Sr 421.552†	13867.3	13218.9	83.992	µg/L	83.992	ppb	09:59:44
1	Sc 361.383	1973767.7	1973767.7	101.56	%			10:01:09
1	Y 371.029	1288207.5	1288207.5	104.83	%			10:01:09
1	Ag 328.068†	-814.2	-746.6	-0.9517	µg/L	-0.9517	ppb	10:01:14
1	As 188.979†	6.8	6.2	18.665	µg/L	18.665	ppb	10:01:35
1	B 249.677†	1299.4	1164.2	11.305	µg/L	11.305	ppb	10:01:14
1	Ba 233.527†	16490.9	16251.7	472.30	µg/L	472.30	ppb	10:01:14
1	Be 313.107†	14437.7	10376.1	6.0454	µg/L	6.0454	ppb	10:01:14
1	Cd 226.502†	271.5	402.8	2.0723	µg/L	2.0723	ppb	10:01:35
1	Co 228.616†	373.3	412.5	16.291	µg/L	16.291	ppb	10:01:35
1	Cr 267.716†	4233.7	4251.4	98.657	µg/L	98.657	ppb	10:01:14
1	Cu 324.752†	8303.6	4507.6	46.010	µg/L	46.010	ppb	10:01:14
1	Mn 257.610†	726097.9	715113.6	2653.1	µg/L	2653.1	ppb	10:01:09
1	Mo 202.031†	88.0	69.5	12.039	µg/L	12.039	ppb	10:01:35
1	Ni 231.604†	1408.6	1051.5	67.356	µg/L	67.356	ppb	10:01:35
1	P 214.914†	601.3	389.5	868.81	µg/L	868.81	ppb	10:01:35
1	Pb 220.353†	341.5	280.4	80.553	µg/L	80.553	ppb	10:01:35
1	S 181.975 Axial†	105.2	78.0	447.26	µg/L	447.26	ppb	10:01:35
1	Sb 206.836†	28.9	6.1	5.0093	µg/L	5.0093	ppb	10:01:35
1	Se 196.026†	-217.3	-226.4	-24.446	µg/L	-24.446	ppb	10:01:35
1	SiO2†	333722.8	326308.4	68875	µg/L	68875	ppb	10:01:09
1	Si 251.611†	385016.2	378786.8	31771	µg/L	31771	ppb	10:01:09
1	Sn 189.927†	-35.9	-58.8	-22.223	µg/L	-22.223	ppb	10:01:35
1	Ti 334.940†	1266100.9	1245843.5	3106.6	µg/L	3106.6	ppb	10:01:09
1	Tl 190.801†	-39.6	-15.9	5.1261	µg/L	5.1261	ppb	10:01:35
1	U 409.014†	-468.7	-228.5	-34.614	µg/L	-34.614	ppb	10:01:09
1	V 292.402†	6257.8	6283.6	83.028	µg/L	83.028	ppb	10:01:14
1	Zn 213.857†	13161.1	12287.3	353.26	µg/L	353.26	ppb	10:01:14
2	Sc RADIAL	78446.2	78446.2	102	%			10:00:10
2	Al 396.153Radial†	56369.3	55228.5	38375	µg/L	38375	ppb	10:00:10
2	Ca 317.933Radial†	14740.5	14183.2	11168	µg/L	11168	ppb	10:00:30
2	Fe 238.204 Radial†	6145.9	6002.6	86176	µg/L	86176	ppb	10:00:30
2	K 766.490 Radial†	10634.9	10002.4	6640.0	µg/L	6640.0	ppb	10:00:10
2	Mg 279.077 IEC†	775.5	751.1	8093.3	µg/L	8093.3	ppb	10:00:30
2	Na 589.592 Radial†	2892.2	2287.3	656.83	µg/L	656.83	ppb	10:00:10
2	Sr 421.552†	14059.2	13210.0	83.935	µg/L	83.935	ppb	10:00:10
2	Sc 361.383	1967103.7	1967103.7	101.22	%			10:01:43
2	Y 371.029	1284299.9	1284299.9	104.52	%			10:01:43
2	Ag 328.068†	-853.6	-788.3	-1.4038	µg/L	-1.4038	ppb	10:01:48
2	As 188.979†	4.8	4.2	14.151	µg/L	14.151	ppb	10:02:09
2	B 249.677†	1305.4	1174.5	12.331	µg/L	12.331	ppb	10:01:48
2	Ba 233.527†	16294.8	16112.9	468.27	µg/L	468.27	ppb	10:01:48
2	Be 313.107†	14254.3	10243.1	5.9536	µg/L	5.9536	ppb	10:01:48
2	Cd 226.502†	272.1	404.2	2.2274	µg/L	2.2274	ppb	10:02:09
2	Co 228.616†	378.6	419.0	16.657	µg/L	16.657	ppb	10:02:09
2	Cr 267.716†	4208.7	4240.8	98.411	µg/L	98.411	ppb	10:01:48
2	Cu 324.752†	8210.9	4443.7	45.390	µg/L	45.390	ppb	10:01:48
2	Mn 257.610†	723179.2	714652.1	2651.2	µg/L	2651.2	ppb	10:01:43
2	Mo 202.031†	90.5	72.2	12.342	µg/L	12.342	ppb	10:02:09
2	Ni 231.604†	1393.6	1041.4	66.707	µg/L	66.707	ppb	10:02:09
2	P 214.914†	589.6	380.0	846.75	µg/L	846.75	ppb	10:02:09
2	Pb 220.353†	325.1	265.2	76.172	µg/L	76.172	ppb	10:02:09

2	S 181.975 Axial†	105.5	78.7	451.12	µg/L	451.12 ppb	10:02:09
2	Sb 206.836†	24.1	1.5	-0.0933	µg/L	-0.0933 ppb	10:02:09
2	Se 196.026†	-216.6	-226.4	-28.382	µg/L	-28.382 ppb	10:02:09
2	SiO2†	332368.1	326083.2	68827	µg/L	68827 ppb	10:01:43
2	Si 251.611†	383266.7	378342.6	31734	µg/L	31734 ppb	10:01:43
2	Sn 189.927†	-33.2	-56.3	-20.881	µg/L	-20.881 ppb	10:02:09
2	Ti 334.940†	1260812.5	1244842.0	3104.1	µg/L	3104.1 ppb	10:01:43
2	Tl 190.801†	-35.5	-12.0	11.776	µg/L	11.776 ppb	10:02:09
2	U 409.014†	-433.8	-195.6	-31.325	µg/L	-31.325 ppb	10:01:43
2	V 292.402†	6228.3	6275.4	82.878	µg/L	82.878 ppb	10:01:48
2	Zn 213.857†	13050.0	12221.4	351.39	µg/L	351.39 ppb	10:01:48
3	Sc RADIAL	77000.4	77000.4	100	%		10:00:36
3	Al 396.153Radial†	55872.9	55769.7	38751	µg/L	38751 ppb	10:00:36
3	Ca 317.933Radial†	14688.4	14402.3	11341	µg/L	11341 ppb	10:00:56
3	Fe 238.204 Radial†	6127.3	6097.0	87532	µg/L	87532 ppb	10:00:56
3	K 766.490 Radial†	10465.0	10028.5	6657.3	µg/L	6657.3 ppb	10:00:36
3	Mg 279.077 IEC†	773.0	762.9	8220.7	µg/L	8220.7 ppb	10:00:56
3	Na 589.592 Radial†	2855.9	2304.3	661.70	µg/L	661.70 ppb	10:00:36
3	Sr 421.552†	13904.4	13314.1	84.596	µg/L	84.596 ppb	10:00:36
3	Sc 361.383	1974702.9	1974702.9	101.61	%		10:02:16
3	Y 371.029	1287841.2	1287841.2	104.80	%		10:02:16
3	Ag 328.068†	-698.9	-632.7	0.1161	µg/L	0.1161 ppb	10:02:22
3	As 188.979†	8.5	7.8	22.537	µg/L	22.537 ppb	10:02:42
3	B 249.677†	1243.8	1108.9	8.4261	µg/L	8.4261 ppb	10:02:22
3	Ba 233.527†	16135.9	15894.6	461.93	µg/L	461.93 ppb	10:02:22
3	Be 313.107†	14117.3	10054.0	5.8440	µg/L	5.8440 ppb	10:02:22
3	Cd 226.502†	219.9	351.8	0.5277	µg/L	0.5277 ppb	10:02:42
3	Co 228.616†	360.7	400.0	15.723	µg/L	15.723 ppb	10:02:42
3	Cr 267.716†	4084.2	4102.3	95.197	µg/L	95.197 ppb	10:02:22
3	Cu 324.752†	8199.8	4401.6	45.262	µg/L	45.262 ppb	10:02:22
3	Mn 257.610†	713641.0	702515.7	2606.6	µg/L	2606.6 ppb	10:02:16
3	Mo 202.031†	82.3	63.8	11.336	µg/L	11.336 ppb	10:02:42
3	Ni 231.604†	1336.2	979.6	62.835	µg/L	62.835 ppb	10:02:42
3	P 214.914†	576.9	365.3	810.75	µg/L	810.75 ppb	10:02:42
3	Pb 220.353†	326.6	265.5	76.215	µg/L	76.215 ppb	10:02:42
3	S 181.975 Axial†	100.0	72.9	417.61	µg/L	417.61 ppb	10:02:42
3	Sb 206.836†	19.1	-3.6	-5.6725	µg/L	-5.6725 ppb	10:02:42
3	Se 196.026†	-202.7	-211.9	-0.2123	µg/L	-0.2123 ppb	10:02:42
3	SiO2†	329115.5	321618.5	67885	µg/L	67885 ppb	10:02:16
3	Si 251.611†	379787.0	373461.0	31325	µg/L	31325 ppb	10:02:16
3	Sn 189.927†	-27.3	-50.3	-17.199	µg/L	-17.199 ppb	10:02:42
3	Ti 334.940†	1242075.6	1221608.7	3046.2	µg/L	3046.2 ppb	10:02:16
3	Tl 190.801†	-41.9	-18.2	0.3990	µg/L	0.3990 ppb	10:02:42
3	U 409.014†	-485.5	-244.9	-36.225	µg/L	-36.225 ppb	10:02:16
3	V 292.402†	6061.8	6087.8	80.597	µg/L	80.597 ppb	10:02:22
3	Zn 213.857†	12909.2	12033.2	345.85	µg/L	345.85 ppb	10:02:22

Mean Data: 244228002|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1971858.1	101.46	%	0.213				0.21%
Sc RADIAL	77590.7	101	%	1.0				0.98%
Y 371.029	1286782.9	104.72	%	0.176				0.17%
Ag 328.068†	-722.5	-0.7465	µg/L	0.78043	-0.7465	ppb	0.78043	104.55%
Al 396.153Radial†	55450.1	38529	µg/L	197.1	38529	ppb	197.1	0.51%
As 188.979†	6.1	18.451	µg/L	4.1969	18.451	ppb	4.1969	22.75%
B 249.677†	1149.2	10.687	µg/L	2.0241	10.687	ppb	2.0241	18.94%
Ba 233.527†	16086.4	467.50	µg/L	5.232	467.50	ppb	5.232	1.12%
Be 313.107†	10224.4	5.9477	µg/L	0.10083	5.9477	ppb	0.10083	1.70%
Ca 317.933Radial†	14309.8	11268	µg/L	89.3	11268	ppb	89.3	0.79%
Cd 226.502†	386.3	1.6091	µg/L	0.93973	1.6091	ppb	0.93973	58.40%
Co 228.616†	410.5	16.224	µg/L	0.4706	16.224	ppb	0.4706	2.90%
Cr 267.716†	4198.1	97.422	µg/L	1.9304	97.422	ppb	1.9304	1.98%
Cu 324.752†	4451.0	45.554	µg/L	0.4003	45.554	ppb	0.4003	0.88%
Fe 238.204 Radial†	6057.4	86963	µg/L	704.1	86963	ppb	704.1	0.81%
K 766.490 Radial†	10033.9	6660.8	µg/L	22.87	6660.8	ppb	22.87	0.34%
Mg 279.077 IEC†	758.1	8168.5	µg/L	66.71	8168.5	ppb	66.71	0.82%
Mn 257.610†	710760.5	2637.0	µg/L	26.33	2637.0	ppb	26.33	1.00%
Mo 202.031†	68.5	11.906	µg/L	0.5159	11.906	ppb	0.5159	4.33%
Na 589.592 Radial†	2288.2	657.09	µg/L	4.490	657.09	ppb	4.490	0.68%

Ni 231.604†	1024.2	65.632 µg/L	2.4446	65.632 ppb	2.4446	3.72%
P 214.914†	378.3	842.10 µg/L	29.310	842.10 ppb	29.310	3.48%
Pb 220.353†	270.4	77.647 µg/L	2.5170	77.647 ppb	2.5170	3.24%
S 181.975 Axial†	76.5	438.66 µg/L	18.331	438.66 ppb	18.331	4.18%
Sb 206.836†	1.3	-0.2522 µg/L	5.34267	-0.2522 ppb	5.34267	>999.9%
Se 196.026†	-221.6	-17.680 µg/L	15.2552	-17.680 ppb	15.2552	86.28%
SiO2†	324670.0	68529 µg/L	558.3	68529 ppb	558.3	0.81%
Si 251.611†	376863.5	31610 µg/L	247.9	31610 ppb	247.9	0.78%
Sn 189.927†	-55.1	-20.101 µg/L	2.6012	-20.101 ppb	2.6012	12.94%
Sr 421.552†	13247.7	84.174 µg/L	0.3665	84.174 ppb	0.3665	0.44%
Ti 334.940†	1237431.4	3085.7 µg/L	34.20	3085.7 ppb	34.20	1.11%
Tl 190.801†	-15.4	5.7668 µg/L	5.71529	5.7668 ppb	5.71529	99.11%
U 409.014†	-223.0	-34.055 µg/L	2.4971	-34.055 ppb	2.4971	7.33%
V 292.402†	6215.6	82.168 µg/L	1.3623	82.168 ppb	1.3623	1.66%
Zn 213.857†	12180.6	350.17 µg/L	3.850	350.17 ppb	3.850	1.10%

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 10:02:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78930.7	78930.7	103	%			10:03:30
1	Al 396.153Radial†	7594.5	7419.3	5144.7	µg/L	5144.7	ppb	10:03:30
1	Ca 317.933Radial†	6809.4	6375.6	5020.3	µg/L	5020.3	ppb	10:03:51
1	Fe 238.204 Radial†	385.8	359.6	5173.3	µg/L	5173.3	ppb	10:03:51
1	K 766.490 Radial†	8224.2	7592.3	5040.0	µg/L	5040.0	ppb	10:03:30
1	Mg 279.077 IEC†	495.6	474.0	5169.3	µg/L	5169.3	ppb	10:03:51
1	Na 589.592 Radial†	36830.9	35300.9	10137	µg/L	10137	ppb	10:03:30
1	Sr 421.552†	82551.3	79785.8	506.95	µg/L	506.95	ppb	10:03:30
1	Sc 361.383	1987417.9	1987417.9	102.27	%			10:04:54
1	Y 371.029	1253652.6	1253652.6	102.02	%			10:04:54
1	Ag 328.068†	56082.4	54895.1	515.44	µg/L	515.44	ppb	10:05:00
1	As 188.979†	237.4	231.6	533.52	µg/L	533.52	ppb	10:05:21
1	B 249.677†	10746.0	10392.8	503.74	µg/L	503.74	ppb	10:05:00
1	Ba 233.527†	18059.5	17674.0	514.41	µg/L	514.41	ppb	10:05:00
1	Be 313.107†	761588.0	740878.4	515.98	µg/L	515.98	ppb	10:04:54
1	Cd 226.502†	17758.8	17500.9	515.10	µg/L	515.10	ppb	10:05:00
1	Co 228.616†	9505.0	9339.4	514.86	µg/L	514.86	ppb	10:05:00
1	Cr 267.716†	22724.6	22304.0	517.65	µg/L	517.65	ppb	10:05:00
1	Cu 324.752†	73622.3	68323.2	514.43	µg/L	514.43	ppb	10:05:00
1	Mn 257.610†	139804.2	136896.9	506.21	µg/L	506.21	ppb	10:05:00
1	Mo 202.031†	4213.5	4103.0	515.53	µg/L	515.53	ppb	10:05:21
1	Ni 231.604†	8695.4	8167.3	514.04	µg/L	514.04	ppb	10:05:00
1	P 214.914†	1322.1	1090.3	2561.3	µg/L	2561.3	ppb	10:05:21
1	Pb 220.353†	1901.7	1803.7	526.17	µg/L	526.17	ppb	10:05:21
1	S 181.975 Axial†	208.3	178.1	1021.1	µg/L	1021.1	ppb	10:05:21
1	Sb 206.836†	509.8	476.1	529.22	µg/L	529.22	ppb	10:05:21
1	Se 196.026†	343.3	323.3	529.67	µg/L	529.67	ppb	10:05:21
1	SiO2†	29247.9	26321.3	5555.7	µg/L	5555.7	ppb	10:05:00
1	Si 251.611†	32010.7	30997.1	2599.9	µg/L	2599.9	ppb	10:05:00
1	Sn 189.927†	953.7	909.1	533.23	µg/L	533.23	ppb	10:05:21
1	Ti 334.940†	212336.9	206859.7	515.58	µg/L	515.58	ppb	10:04:54
1	Tl 190.801†	284.0	300.8	522.67	µg/L	522.67	ppb	10:05:21
1	U 409.014†	5260.3	5376.8	512.07	µg/L	512.07	ppb	10:05:00
1	V 292.402†	42304.3	41489.3	521.89	µg/L	521.89	ppb	10:05:00
1	Zn 213.857†	18721.1	17635.1	510.48	µg/L	510.48	ppb	10:05:00
2	Sc RADIAL	78794.4	78794.4	103	%			10:03:56
2	Al 396.153Radial†	7561.7	7400.1	5131.2	µg/L	5131.2	ppb	10:03:56
2	Ca 317.933Radial†	6825.7	6403.0	5041.8	µg/L	5041.8	ppb	10:04:17
2	Fe 238.204 Radial†	385.9	360.3	5184.0	µg/L	5184.0	ppb	10:04:17
2	K 766.490 Radial†	8239.4	7620.9	5059.0	µg/L	5059.0	ppb	10:03:56
2	Mg 279.077 IEC†	504.5	483.6	5273.6	µg/L	5273.6	ppb	10:04:17
2	Na 589.592 Radial†	36692.3	35227.8	10116	µg/L	10116	ppb	10:03:56
2	Sr 421.552†	82261.8	79642.5	506.04	µg/L	506.04	ppb	10:03:56
2	Sc 361.383	1963776.6	1963776.6	101.05	%			10:05:27
2	Y 371.029	1237823.3	1237823.3	100.73	%			10:05:27
2	Ag 328.068†	56176.5	55648.5	522.51	µg/L	522.51	ppb	10:05:33
2	As 188.979†	229.3	226.4	521.41	µg/L	521.41	ppb	10:05:53
2	B 249.677†	10829.8	10602.2	513.94	µg/L	513.94	ppb	10:05:33
2	Ba 233.527†	18137.8	17964.1	522.86	µg/L	522.86	ppb	10:05:33
2	Be 313.107†	751862.6	740219.2	515.52	µg/L	515.52	ppb	10:05:27
2	Cd 226.502†	17744.9	17696.2	520.86	µg/L	520.86	ppb	10:05:33
2	Co 228.616†	9543.1	9489.1	523.12	µg/L	523.12	ppb	10:05:33
2	Cr 267.716†	22822.5	22668.4	526.11	µg/L	526.11	ppb	10:05:33
2	Cu 324.752†	73788.9	69354.8	522.19	µg/L	522.19	ppb	10:05:33
2	Mn 257.610†	140203.2	138937.5	513.75	µg/L	513.75	ppb	10:05:33
2	Mo 202.031†	4223.7	4162.6	523.03	µg/L	523.03	ppb	10:05:53
2	Ni 231.604†	8724.6	8298.6	522.30	µg/L	522.30	ppb	10:05:33
2	P 214.914†	1337.1	1120.7	2633.3	µg/L	2633.3	ppb	10:05:53
2	Pb 220.353†	1899.7	1824.1	532.11	µg/L	532.11	ppb	10:05:53

2	S 181.975 Axial†	207.6	179.9	1031.4 µg/L	1031.4 ppb	10:05:53
2	Sb 206.836†	518.2	490.5	545.15 µg/L	545.15 ppb	10:05:53
2	Se 196.026†	342.3	326.3	534.41 µg/L	534.41 ppb	10:05:53
2	SiO2†	29285.2	26702.5	5636.2 µg/L	5636.2 ppb	10:05:33
2	Si 251.611†	32072.6	31435.2	2636.7 µg/L	2636.7 ppb	10:05:33
2	Sn 189.927†	957.6	924.2	542.07 µg/L	542.07 ppb	10:05:53
2	Ti 334.940†	209980.2	207027.1	515.99 µg/L	515.99 ppb	10:05:27
2	Tl 190.801†	286.9	307.0	533.34 µg/L	533.34 ppb	10:05:53
2	U 409.014†	5272.9	5451.2	519.17 µg/L	519.17 ppb	10:05:33
2	V 292.402†	42466.8	42148.2	530.16 µg/L	530.16 ppb	10:05:33
2	Zn 213.857†	18784.9	17918.6	518.69 µg/L	518.69 ppb	10:05:33
3	Sc RADIAL	78235.3	78235.3	102 %		10:04:22
3	Al 396.153Radial†	7548.6	7439.9	5160.2 µg/L	5160.2 ppb	10:04:22
3	Ca 317.933Radial†	6840.1	6464.6	5090.4 µg/L	5090.4 ppb	10:04:43
3	Fe 238.204 Radial†	383.1	360.3	5182.7 µg/L	5182.7 ppb	10:04:43
3	K 766.490 Radial†	8176.5	7616.5	5056.1 µg/L	5056.1 ppb	10:04:22
3	Mg 279.077 IEC†	499.5	482.2	5257.3 µg/L	5257.3 ppb	10:04:43
3	Na 589.592 Radial†	36548.6	35342.3	10149 µg/L	10149 ppb	10:04:22
3	Sr 421.552†	81735.9	79699.3	506.40 µg/L	506.40 ppb	10:04:22
3	Sc 361.383	1972507.2	1972507.2	101.50 %		10:06:00
3	Y 371.029	1244522.4	1244522.4	101.28 %		10:06:00
3	Ag 328.068†	54764.3	54011.1	507.05 µg/L	507.05 ppb	10:06:06
3	As 188.979†	209.6	206.0	474.43 µg/L	474.43 ppb	10:06:26
3	B 249.677†	10500.3	10230.1	495.78 µg/L	495.78 ppb	10:06:06
3	Ba 233.527†	17325.3	17084.1	497.24 µg/L	497.24 ppb	10:06:06
3	Be 313.107†	740051.9	725289.6	505.13 µg/L	505.13 ppb	10:06:00
3	Cd 226.502†	17046.2	16930.1	498.28 µg/L	498.28 ppb	10:06:06
3	Co 228.616†	9069.7	8980.8	495.04 µg/L	495.04 ppb	10:06:06
3	Cr 267.716†	21321.3	21089.4	489.47 µg/L	489.47 ppb	10:06:06
3	Cu 324.752†	70407.2	65699.8	494.71 µg/L	494.71 ppb	10:06:06
3	Mn 257.610†	133221.9	131445.0	486.07 µg/L	486.07 ppb	10:06:06
3	Mo 202.031†	3737.6	3665.3	460.56 µg/L	460.56 ppb	10:06:26
3	Ni 231.604†	8310.3	7852.3	494.21 µg/L	494.21 ppb	10:06:06
3	P 214.914†	1214.5	994.1	2332.1 µg/L	2332.1 ppb	10:06:26
3	Pb 220.353†	1739.3	1657.7	483.51 µg/L	483.51 ppb	10:06:26
3	S 181.975 Axial†	199.8	171.3	982.02 µg/L	982.02 ppb	10:06:26
3	Sb 206.836†	463.6	434.4	482.49 µg/L	482.49 ppb	10:06:26
3	Se 196.026†	316.8	299.7	492.43 µg/L	492.43 ppb	10:06:26
3	SiO2†	28360.6	25663.2	5416.8 µg/L	5416.8 ppb	10:06:06
3	Si 251.611†	30927.1	30166.1	2530.2 µg/L	2530.2 ppb	10:06:06
3	Sn 189.927†	844.1	808.2	474.34 µg/L	474.34 ppb	10:06:26
3	Ti 334.940†	205918.4	202105.4	503.71 µg/L	503.71 ppb	10:06:00
3	Tl 190.801†	267.6	286.7	498.16 µg/L	498.16 ppb	10:06:26
3	U 409.014†	4957.5	5117.3	487.31 µg/L	487.31 ppb	10:06:06
3	V 292.402†	40147.9	39677.5	498.84 µg/L	498.84 ppb	10:06:06
3	Zn 213.857†	17893.0	16957.6	490.85 µg/L	490.85 ppb	10:06:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1974567.2	101.60	%	0.615				0.61%
Sc RADIAL	78653.4	102	%	0.5				0.47%
Y 371.029	1245332.8	101.35	%	0.647				0.64%
Ag 328.068†	54851.6	515.00	µg/L	7.742	515.00	ppb	7.742	1.50%
QC value within limits for Ag 328.068 Recovery = 103.00%								
Al 396.153Radial†	7419.8	5145.4	µg/L	14.48	5145.4	ppb	14.48	0.28%
QC value within limits for Al 396.153Radial Recovery = 102.91%								
As 188.979†	221.3	509.79	µg/L	31.214	509.79	ppb	31.214	6.12%
QC value within limits for As 188.979 Recovery = 101.96%								
B 249.677†	10408.4	504.48	µg/L	9.102	504.48	ppb	9.102	1.80%
QC value within limits for B 249.677 Recovery = 100.90%								
Ba 233.527†	17574.1	511.50	µg/L	13.057	511.50	ppb	13.057	2.55%
QC value within limits for Ba 233.527 Recovery = 102.30%								
Be 313.107†	735462.4	512.21	µg/L	6.140	512.21	ppb	6.140	1.20%
QC value within limits for Be 313.107 Recovery = 102.44%								
Ca 317.933Radial†	6414.4	5050.8	µg/L	35.92	5050.8	ppb	35.92	0.71%
QC value within limits for Ca 317.933Radial Recovery = 101.02%								
Cd 226.502†	17375.7	511.41	µg/L	11.734	511.41	ppb	11.734	2.29%
QC value within limits for Cd 226.502 Recovery = 102.28%								
Co 228.616†	9269.8	511.01	µg/L	14.433	511.01	ppb	14.433	2.82%

QC value within limits for Co 228.616 Recovery = 102.20%

Cr 267.716†	22020.6	511.08 µg/L	19.186	511.08 ppb	19.186	3.75%

QC value within limits for Cr 267.716 Recovery = 102.22%

Cu 324.752†	67792.6	510.44 µg/L	14.168	510.44 ppb	14.168	2.78%

QC value within limits for Cu 324.752 Recovery = 102.09%

Fe 238.204 Radial†	360.1	5180.0 µg/L	5.84	5180.0 ppb	5.84	0.11%

QC value within limits for Fe 238.204 Radial Recovery = 103.60%

K 766.490 Radial†	7609.9	5051.7 µg/L	10.24	5051.7 ppb	10.24	0.20%

QC value within limits for K 766.490 Radial Recovery = 101.03%

Mg 279.077 IEC†	479.9	5233.4 µg/L	56.09	5233.4 ppb	56.09	1.07%

QC value within limits for Mg 279.077 IEC Recovery = 104.67%

Mn 257.610†	135759.8	502.01 µg/L	14.310	502.01 ppb	14.310	2.85%

QC value within limits for Mn 257.610 Recovery = 100.40%

Mo 202.031†	3977.0	499.71 µg/L	34.110	499.71 ppb	34.110	6.83%

QC value within limits for Mo 202.031 Recovery = 99.94%

Na 589.592 Radial†	35290.4	10134 µg/L	16.6	10134 ppb	16.6	0.16%

QC value within limits for Na 589.592 Radial Recovery = 101.34%

Ni 231.604†	8106.1	510.19 µg/L	14.436	510.19 ppb	14.436	2.83%

QC value within limits for Ni 231.604 Recovery = 102.04%

P 214.914†	1068.4	2508.9 µg/L	157.30	2508.9 ppb	157.30	6.27%

QC value within limits for P 214.914 Recovery = 100.36%

Pb 220.353†	1761.8	513.93 µg/L	26.510	513.93 ppb	26.510	5.16%

QC value within limits for Pb 220.353 Recovery = 102.79%

S 181.975 Axial†	176.5	1011.5 µg/L	26.06	1011.5 ppb	26.06	2.58%

QC value within limits for S 181.975 Axial Recovery = 101.15%

Sb 206.836†	467.0	518.95 µg/L	32.570	518.95 ppb	32.570	6.28%

QC value within limits for Sb 206.836 Recovery = 103.79%

Se 196.026†	316.4	518.84 µg/L	22.994	518.84 ppb	22.994	4.43%

QC value within limits for Se 196.026 Recovery = 103.77%

SiO2†	26229.0	5536.2 µg/L	110.97	5536.2 ppb	110.97	2.00%

QC value within limits for SiO2 Recovery = 103.53%

Si 251.611†	30866.2	2589.0 µg/L	54.07	2589.0 ppb	54.07	2.09%

QC value within limits for Si 251.611 Recovery = 103.56%

Sn 189.927†	880.5	516.55 µg/L	36.818	516.55 ppb	36.818	7.13%

QC value within limits for Sn 189.927 Recovery = 103.31%

Sr 421.552†	79709.2	506.47 µg/L	0.458	506.47 ppb	0.458	0.09%

QC value within limits for Sr 421.552 Recovery = 101.29%

Ti 334.940†	205330.7	511.76 µg/L	6.970	511.76 ppb	6.970	1.36%

QC value within limits for Ti 334.940 Recovery = 102.35%

Tl 190.801†	298.2	518.06 µg/L	18.041	518.06 ppb	18.041	3.48%

QC value within limits for Tl 190.801 Recovery = 103.61%

U 409.014†	5315.1	506.18 µg/L	16.728	506.18 ppb	16.728	3.30%

QC value within limits for U 409.014 Recovery = 101.24%

V 292.402†	41105.0	516.96 µg/L	16.231	516.96 ppb	16.231	3.14%

QC value within limits for V 292.402 Recovery = 103.39%

Zn 213.857†	17503.8	506.68 µg/L	14.309	506.68 ppb	14.309	2.82%

QC value within limits for Zn 213.857 Recovery = 101.34%

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 10:06:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76167.5	76167.5	99.2	%			10:07:08
1	Al 396.153Radial†	-30.6	-2.9	-2.0154	µg/L	-2.0154	ppb	10:07:08
1	Ca 317.933Radial†	255.2	5.7	4.5179	µg/L	4.5179	ppb	10:07:28
1	Fe 238.204 Radial†	19.3	3.6	51.197	µg/L	51.197	ppb	10:07:28
1	K 766.490 Radial†	441.1	32.9	21.862	µg/L	21.862	ppb	10:07:08
1	Mg 279.077 IEC†	10.2	1.9	20.973	µg/L	20.973	ppb	10:07:28
1	Na 589.592 Radial†	435.3	-105.9	-30.403	µg/L	-30.403	ppb	10:07:08
1	Sr 421.552†	581.9	29.2	0.1856	µg/L	0.1856	ppb	10:07:08
1	Sc 361.383	1969413.2	1969413.2	101.34	%			10:08:30
1	Y 371.029	1246832.7	1246832.7	101.47	%			10:08:30
1	Ag 328.068†	-60.7	-4.8	-0.0398	µg/L	-0.0398	ppb	10:08:36
1	As 188.979†	0.1	-0.5	-1.1488	µg/L	-1.1488	ppb	10:08:56
1	B 249.677†	152.7	35.5	1.7007	µg/L	1.7007	ppb	10:08:56
1	Ba 233.527†	-18.4	-3.7	-0.1057	µg/L	-0.1057	ppb	10:08:56
1	Be 313.107†	3908.7	17.6	0.0121	µg/L	0.0121	ppb	10:08:36
1	Cd 226.502†	-131.0	6.2	0.1760	µg/L	0.1760	ppb	10:08:56
1	Co 228.616†	-47.0	-1.4	-0.0771	µg/L	-0.0771	ppb	10:08:56
1	Cr 267.716†	-72.6	11.2	0.2590	µg/L	0.2590	ppb	10:08:36
1	Cu 324.752†	3791.8	73.5	0.5594	µg/L	0.5594	ppb	10:08:36
1	Mn 257.610†	-152.5	39.1	0.1502	µg/L	0.1502	ppb	10:08:56
1	Mo 202.031†	14.5	-2.9	-0.3622	µg/L	-0.3622	ppb	10:08:56
1	Ni 231.604†	346.8	6.8	0.4307	µg/L	0.4307	ppb	10:08:56
1	P 214.914†	201.6	-3.6	-8.6519	µg/L	-8.6519	ppb	10:08:56
1	Pb 220.353†	63.7	6.9	2.0184	µg/L	2.0184	ppb	10:08:56
1	S 181.975 Axial†	23.0	-2.9	-16.436	µg/L	-16.436	ppb	10:08:56
1	Sb 206.836†	30.3	7.5	8.2873	µg/L	8.2873	ppb	10:08:56
1	Se 196.026†	6.2	-6.3	-9.7576	µg/L	-9.7576	ppb	10:08:56
1	SiO2†	2278.2	-30.7	-6.4696	µg/L	-6.4696	ppb	10:08:36
1	Si 251.611†	359.6	50.4	4.2244	µg/L	4.2244	ppb	10:08:56
1	Sn 189.927†	23.5	-0.2	-0.1263	µg/L	-0.1263	ppb	10:08:56
1	Ti 334.940†	947.6	161.4	0.4009	µg/L	0.4009	ppb	10:08:36
1	Tl 190.801†	-25.5	-2.1	-3.5935	µg/L	-3.5935	ppb	10:08:56
1	U 409.014†	-236.7	-0.6	-0.0643	µg/L	-0.0643	ppb	10:08:36
1	V 292.402†	-98.9	24.5	0.3052	µg/L	0.3052	ppb	10:08:36
1	Zn 213.857†	681.4	1.1	0.0265	µg/L	0.0265	ppb	10:08:56
2	Sc RADIAL	76583.4	76583.4	99.7	%			10:07:34
2	Al 396.153Radial†	-34.7	-6.8	-4.7669	µg/L	-4.7669	ppb	10:07:34
2	Ca 317.933Radial†	249.3	-1.6	-1.2327	µg/L	-1.2327	ppb	10:07:54
2	Fe 238.204 Radial†	18.9	3.1	43.851	µg/L	43.851	ppb	10:07:54
2	K 766.490 Radial†	421.1	10.4	6.9301	µg/L	6.9301	ppb	10:07:34
2	Mg 279.077 IEC†	11.6	3.3	35.801	µg/L	35.801	ppb	10:07:54
2	Na 589.592 Radial†	447.8	-95.7	-27.486	µg/L	-27.486	ppb	10:07:34
2	Sr 421.552†	570.3	14.4	0.0915	µg/L	0.0915	ppb	10:07:34
2	Sc 361.383	1957148.2	1957148.2	100.71	%			10:09:03
2	Y 371.029	1239345.3	1239345.3	100.86	%			10:09:03
2	Ag 328.068†	-77.2	-21.5	-0.1969	µg/L	-0.1969	ppb	10:09:08
2	As 188.979†	-0.8	-1.3	-3.0219	µg/L	-3.0219	ppb	10:09:29
2	B 249.677†	142.4	26.2	1.2534	µg/L	1.2534	ppb	10:09:29
2	Ba 233.527†	-13.9	0.7	0.0213	µg/L	0.0213	ppb	10:09:29
2	Be 313.107†	3932.3	65.2	0.0453	µg/L	0.0453	ppb	10:09:08
2	Cd 226.502†	-136.4	0.0	-0.0043	µg/L	-0.0043	ppb	10:09:29
2	Co 228.616†	-41.4	3.9	0.2174	µg/L	0.2174	ppb	10:09:29
2	Cr 267.716†	-73.1	10.2	0.2376	µg/L	0.2376	ppb	10:09:08
2	Cu 324.752†	3720.6	26.2	0.2032	µg/L	0.2032	ppb	10:09:08
2	Mn 257.610†	-152.0	38.5	0.1467	µg/L	0.1467	ppb	10:09:29
2	Mo 202.031†	28.3	10.9	1.3718	µg/L	1.3718	ppb	10:09:29
2	Ni 231.604†	346.3	8.4	0.5302	µg/L	0.5302	ppb	10:09:29
2	P 214.914†	198.4	-5.4	-13.125	µg/L	-13.125	ppb	10:09:29
2	Pb 220.353†	68.3	11.9	3.4800	µg/L	3.4800	ppb	10:09:29

2	S 181.975 Axial†	25.5	-0.2	-1.0437 µg/L	-1.0437 ppb	10:09:29
2	Sb 206.836†	28.9	6.3	7.0434 µg/L	7.0434 ppb	10:09:29
2	Se 196.026†	5.4	-7.1	-11.022 µg/L	-11.022 ppb	10:09:29
2	SiO2†	2308.7	13.7	2.8956 µg/L	2.8956 ppb	10:09:08
2	Si 251.611†	377.1	69.9	5.8641 µg/L	5.8641 ppb	10:09:29
2	Sn 189.927†	19.7	-3.8	-2.2317 µg/L	-2.2317 ppb	10:09:29
2	Ti 334.940†	910.6	130.6	0.3228 µg/L	0.3228 ppb	10:09:08
2	Tl 190.801†	-20.3	3.0	5.1015 µg/L	5.1015 ppb	10:09:29
2	U 409.014†	-278.6	-43.7	-4.1719 µg/L	-4.1719 ppb	10:09:08
2	V 292.402†	-108.6	14.3	0.1864 µg/L	0.1864 ppb	10:09:08
2	Zn 213.857†	687.0	10.8	0.3085 µg/L	0.3085 ppb	10:09:29
3	Sc RADIAL	76172.6	76172.6	99.2 %		10:08:00
3	Al 396.153Radial†	-25.3	2.4	1.6852 µg/L	1.6852 ppb	10:08:00
3	Ca 317.933Radial†	256.8	7.3	5.7840 µg/L	5.7840 ppb	10:08:20
3	Fe 238.204 Radial†	16.9	1.1	16.320 µg/L	16.320 ppb	10:08:20
3	K 766.490 Radial†	419.8	11.4	7.5461 µg/L	7.5461 ppb	10:08:00
3	Mg 279.077 IEC†	9.5	1.3	13.955 µg/L	13.955 ppb	10:08:20
3	Na 589.592 Radial†	429.4	-111.9	-32.124 µg/L	-32.124 ppb	10:08:00
3	Sr 421.552†	571.0	18.2	0.1157 µg/L	0.1157 ppb	10:08:00
3	Sc 361.383	1961861.5	1961861.5	100.95 %		10:09:35
3	Y 371.029	1241859.8	1241859.8	101.06 %		10:09:35
3	Ag 328.068†	9.7	64.7	0.6052 µg/L	0.6052 ppb	10:09:40
3	As 188.979†	-2.3	-2.8	-6.4475 µg/L	-6.4475 ppb	10:10:01
3	B 249.677†	136.8	20.3	0.9823 µg/L	0.9823 ppb	10:10:01
3	Ba 233.527†	-18.4	-3.7	-0.1059 µg/L	-0.1059 ppb	10:10:01
3	Be 313.107†	3966.3	89.6	0.0623 µg/L	0.0623 ppb	10:09:40
3	Cd 226.502†	-137.2	-0.5	-0.0152 µg/L	-0.0152 ppb	10:10:01
3	Co 228.616†	-51.8	-6.3	-0.3468 µg/L	-0.3468 ppb	10:10:01
3	Cr 267.716†	-56.1	27.2	0.6315 µg/L	0.6315 ppb	10:09:40
3	Cu 324.752†	3807.8	103.7	0.7821 µg/L	0.7821 ppb	10:09:40
3	Mn 257.610†	-157.7	33.3	0.1245 µg/L	0.1245 ppb	10:10:01
3	Mo 202.031†	16.2	-1.2	-0.1452 µg/L	-0.1452 ppb	10:10:01
3	Ni 231.604†	342.0	3.3	0.2098 µg/L	0.2098 ppb	10:10:01
3	P 214.914†	205.6	1.1	2.6470 µg/L	2.6470 ppb	10:10:01
3	Pb 220.353†	52.3	-4.1	-1.2120 µg/L	-1.2120 ppb	10:10:01
3	S 181.975 Axial†	24.8	-0.9	-5.2354 µg/L	-5.2354 ppb	10:10:01
3	Sb 206.836†	23.2	0.6	0.6139 µg/L	0.6139 ppb	10:10:01
3	Se 196.026†	11.2	-1.4	-2.0875 µg/L	-2.0875 ppb	10:10:01
3	SiO2†	2305.9	5.4	1.1466 µg/L	1.1466 ppb	10:09:40
3	Si 251.611†	369.9	61.9	5.1959 µg/L	5.1959 ppb	10:10:01
3	Sn 189.927†	25.0	1.4	0.8063 µg/L	0.8063 ppb	10:10:01
3	Ti 334.940†	942.8	160.3	0.3987 µg/L	0.3987 ppb	10:09:40
3	Tl 190.801†	-20.2	3.0	5.2028 µg/L	5.2028 ppb	10:10:01
3	U 409.014†	-216.2	18.8	1.7917 µg/L	1.7917 ppb	10:09:40
3	V 292.402†	-108.9	14.3	0.1805 µg/L	0.1805 ppb	10:09:40
3	Zn 213.857†	667.4	-10.2	-0.3015 µg/L	-0.3015 ppb	10:10:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1962807.6	101.00	%	0.318				0.32%
Sc RADIAL	76307.8	99.3	%	0.31				0.31%
Y 371.029	1242679.2	101.13	%	0.310				0.31%
Ag 328.068†	12.8	0.1228	µg/L	0.42507	0.1228	ppb	0.42507	346.04%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.4	-1.6990	µg/L	3.23767	-1.6990	ppb	3.23767	190.56%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.5	-3.5394	µg/L	2.68700	-3.5394	ppb	2.68700	75.92%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	27.4	1.3121	µg/L	0.36278	1.3121	ppb	0.36278	27.65%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.2	-0.0635	µg/L	0.07337	-0.0635	ppb	0.07337	115.63%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	57.5	0.0399	µg/L	0.02551	0.0399	ppb	0.02551	63.94%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.8	3.0230	µg/L	3.73955	3.0230	ppb	3.73955	123.70%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.9	0.0521	µg/L	0.10736	0.0521	ppb	0.10736	205.90%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.2	-0.0688	µg/L	0.28217	-0.0688	ppb	0.28217	410.03%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                16.2      0.3761 µg/L       0.22152      0.3761 ppb        0.22152  58.91%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                67.8      0.5149 µg/L       0.29200      0.5149 ppb        0.29200  56.71%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.6     37.123 µg/L      18.3861     37.123 ppb       18.3861  49.53%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          18.2     12.113 µg/L       8.4485     12.113 ppb        8.4485  69.75%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             2.2     23.577 µg/L      11.1531     23.577 ppb       11.1531  47.31%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                36.9      0.1405 µg/L       0.01393      0.1405 ppb        0.01393   9.92%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 2.3      0.2881 µg/L       0.94475      0.2881 ppb        0.94475 327.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -104.5    -30.004 µg/L       2.3442    -30.004 ppb        2.3442   7.81%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 6.2      0.3902 µg/L       0.16401      0.3902 ppb        0.16401  42.03%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.6     -6.3768 µg/L       8.12859     -6.3768 ppb        8.12859 127.47%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 4.9      1.4288 µg/L       2.40090      1.4288 ppb        2.40090 168.04%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.3     -7.5718 µg/L       7.95784     -7.5718 ppb        7.95784 105.10%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 4.8      5.3149 µg/L       4.11838      5.3149 ppb        4.11838  77.49%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.9     -7.6223 µg/L       4.83478     -7.6223 ppb        4.83478  63.43%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      -3.8     -0.8092 µg/L       4.97951     -0.8092 ppb        4.97951 615.39%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                60.7      5.0948 µg/L       0.82452      5.0948 ppb        0.82452  16.18%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                -0.9     -0.5172 µg/L       1.55628     -0.5172 ppb        1.55628 300.90%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                20.6      0.1309 µg/L       0.04887      0.1309 ppb        0.04887  37.33%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               150.7      0.3741 µg/L       0.04451      0.3741 ppb        0.04451  11.90%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.3      2.2369 µg/L       5.04958      2.2369 ppb        5.04958 225.74%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 -8.5     -0.8148 µg/L       3.05180     -0.8148 ppb        3.05180 374.53%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 17.7      0.2241 µg/L       0.07035      0.2241 ppb        0.07035  31.40%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 0.6      0.0112 µg/L       0.30527      0.0112 ppb        0.30527 >999.9%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 12
Sample ID: 244228003|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 310
Date Collected: 1/27/2010 10:10:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228003|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78769.2	78769.2	103	%			10:10:49
1	Al 396.153Radial†	52481.5	51210.5	35583	µg/L	35583	ppb	10:10:49
1	Ca 317.933Radial†	9604.9	9115.5	7177.8	µg/L	7177.8	ppb	10:11:10
1	Fe 238.204 Radial†	7027.5	6837.7	98165	µg/L	98165	ppb	10:11:10
1	K 766.490 Radial†	7194.0	6603.9	4383.9	µg/L	4383.9	ppb	10:10:49
1	Mg 279.077 IEC†	568.6	546.3	5848.3	µg/L	5848.3	ppb	10:11:10
1	Na 589.592 Radial†	4821.7	4157.4	1193.9	µg/L	1193.9	ppb	10:10:49
1	Sr 421.552†	7553.7	6809.1	43.264	µg/L	43.264	ppb	10:10:49
1	Sc 361.383	1989916.0	1989916.0	102.39	%			10:12:14
1	Y 371.029	1346442.0	1346442.0	109.57	%			10:12:14
1	Ag 328.068†	-923.9	-847.2	-1.3443	µg/L	-1.3443	ppb	10:12:20
1	As 188.979†	8.1	7.3	22.209	µg/L	22.209	ppb	10:12:40
1	B 249.677†	1287.1	1141.8	4.4965	µg/L	4.4965	ppb	10:12:20
1	Ba 233.527†	9453.3	9246.8	268.75	µg/L	268.75	ppb	10:12:20
1	Be 313.107†	20116.3	15806.6	9.4894	µg/L	9.4894	ppb	10:12:20
1	Cd 226.502†	313.1	441.2	1.9651	µg/L	1.9651	ppb	10:12:20
1	Co 228.616†	282.7	321.1	9.3894	µg/L	9.3894	ppb	10:12:40
1	Cr 267.716†	4629.8	4604.3	106.83	µg/L	106.83	ppb	10:12:20
1	Cu 324.752†	6571.0	2749.1	34.315	µg/L	34.315	ppb	10:12:20
1	Mn 257.610†	722161.2	705467.3	2619.0	µg/L	2619.0	ppb	10:12:14
1	Mo 202.031†	102.0	82.5	14.086	µg/L	14.086	ppb	10:12:40
1	Ni 231.604†	1482.9	1112.8	71.368	µg/L	71.368	ppb	10:12:40
1	P 214.914†	670.3	452.1	1010.4	µg/L	1010.4	ppb	10:12:40
1	Pb 220.353†	179.6	119.5	33.195	µg/L	33.195	ppb	10:12:40
1	S 181.975 Axial†	35.6	9.2	52.864	µg/L	52.864	ppb	10:12:40
1	Sb 206.836†	29.4	6.3	5.4262	µg/L	5.4262	ppb	10:12:40
1	Se 196.026†	-246.9	-253.5	-25.293	µg/L	-25.293	ppb	10:12:40
1	SiO2†	351814.6	341310.8	72042	µg/L	72042	ppb	10:12:14
1	Si 251.611†	406348.5	396544.0	33261	µg/L	33261	ppb	10:12:14
1	Sn 189.927†	-23.3	-46.2	-15.207	µg/L	-15.207	ppb	10:12:40
1	Ti 334.940†	1642262.0	1603093.8	3997.7	µg/L	3997.7	ppb	10:12:14
1	Tl 190.801†	-44.4	-20.3	5.1021	µg/L	5.1021	ppb	10:12:40
1	U 409.014†	-1663.7	-1391.8	-146.90	µg/L	-146.90	ppb	10:12:14
1	V 292.402†	4474.8	4492.4	61.252	µg/L	61.252	ppb	10:12:20
1	Zn 213.857†	15439.2	14407.0	414.67	µg/L	414.67	ppb	10:12:20
2	Sc RADIAL	77894.7	77894.7	101	%			10:11:15
2	Al 396.153Radial†	51942.9	51254.0	35614	µg/L	35614	ppb	10:11:15
2	Ca 317.933Radial†	9598.9	9214.8	7255.9	µg/L	7255.9	ppb	10:11:35
2	Fe 238.204 Radial†	7030.9	6918.0	99318	µg/L	99318	ppb	10:11:35
2	K 766.490 Radial†	7190.5	6679.3	4433.9	µg/L	4433.9	ppb	10:11:15
2	Mg 279.077 IEC†	568.0	551.9	5908.3	µg/L	5908.3	ppb	10:11:35
2	Na 589.592 Radial†	4782.8	4171.9	1198.0	µg/L	1198.0	ppb	10:11:15
2	Sr 421.552†	7423.3	6763.1	42.972	µg/L	42.972	ppb	10:11:15
2	Sc 361.383	1978944.7	1978944.7	101.83	%			10:12:48
2	Y 371.029	1340260.4	1340260.4	109.07	%			10:12:48
2	Ag 328.068†	-949.7	-877.5	-1.5535	µg/L	-1.5535	ppb	10:12:54
2	As 188.979†	7.5	6.9	21.186	µg/L	21.186	ppb	10:13:14
2	B 249.677†	1335.6	1196.4	6.5533	µg/L	6.5533	ppb	10:12:54
2	Ba 233.527†	9477.3	9321.6	270.92	µg/L	270.92	ppb	10:12:54
2	Be 313.107†	20224.8	16022.0	9.6358	µg/L	9.6358	ppb	10:12:54
2	Cd 226.502†	314.1	444.0	1.9160	µg/L	1.9160	ppb	10:12:54
2	Co 228.616†	277.4	317.4	9.1650	µg/L	9.1650	ppb	10:13:14
2	Cr 267.716†	4639.7	4639.2	107.64	µg/L	107.64	ppb	10:12:54
2	Cu 324.752†	6548.1	2762.3	34.574	µg/L	34.574	ppb	10:12:54
2	Mn 257.610†	719362.9	706629.4	2623.4	µg/L	2623.4	ppb	10:12:48
2	Mo 202.031†	102.5	83.5	14.258	µg/L	14.258	ppb	10:13:14
2	Ni 231.604†	1474.3	1112.4	71.356	µg/L	71.356	ppb	10:13:14
2	P 214.914†	665.7	451.3	1007.5	µg/L	1007.5	ppb	10:13:14
2	Pb 220.353†	179.2	120.0	33.302	µg/L	33.302	ppb	10:13:14

2	S 181.975 Axial†	36.0	9.8	56.415	µg/L	56.415 ppb	10:13:14
2	Sb 206.836†	27.6	4.7	3.6948	µg/L	3.6948 ppb	10:13:14
2	Se 196.026†	-241.0	-249.1	-13.936	µg/L	-13.936 ppb	10:13:14
2	SiO2†	350828.0	342246.8	72239	µg/L	72239 ppb	10:12:48
2	Si 251.611†	405007.4	397427.1	33335	µg/L	33335 ppb	10:12:48
2	Sn 189.927†	-16.0	-39.1	-10.954	µg/L	-10.954 ppb	10:13:14
2	Ti 334.940†	1637156.0	1606971.5	4007.4	µg/L	4007.4 ppb	10:12:48
2	Tl 190.801†	-48.3	-24.4	-1.8050	µg/L	-1.8050 ppb	10:13:14
2	U 409.014†	-1510.4	-1250.3	-133.56	µg/L	-133.56 ppb	10:12:48
2	V 292.402†	4460.1	4502.1	61.451	µg/L	61.451 ppb	10:12:54
2	Zn 213.857†	15462.1	14513.0	417.70	µg/L	417.70 ppb	10:12:54
3	Sc RADIAL	78606.5	78606.5	102	%		10:11:41
3	Al 396.153Radial†	52532.6	51366.4	35692	µg/L	35692 ppb	10:11:41
3	Ca 317.933Radial†	9578.1	9108.7	7172.4	µg/L	7172.4 ppb	10:12:01
3	Fe 238.204 Radial†	7016.8	6841.5	98219	µg/L	98219 ppb	10:12:01
3	K 766.490 Radial†	7234.4	6658.0	4419.8	µg/L	4419.8 ppb	10:11:41
3	Mg 279.077 IEC†	561.1	540.1	5780.8	µg/L	5780.8 ppb	10:12:01
3	Na 589.592 Radial†	4825.2	4170.6	1197.7	µg/L	1197.7 ppb	10:11:41
3	Sr 421.552†	7481.2	6753.5	42.911	µg/L	42.911 ppb	10:11:41
3	Sc 361.383	1982965.0	1982965.0	102.04	%		10:13:22
3	Y 371.029	1341818.1	1341818.1	109.20	%		10:13:22
3	Ag 328.068†	-884.7	-812.0	-1.0223	µg/L	-1.0223 ppb	10:13:27
3	As 188.979†	6.6	5.9	19.030	µg/L	19.030 ppb	10:13:48
3	B 249.677†	1253.6	1113.4	3.0800	µg/L	3.0800 ppb	10:13:27
3	Ba 233.527†	9200.5	9031.4	262.49	µg/L	262.49 ppb	10:13:27
3	Be 313.107†	19620.9	15389.9	9.2201	µg/L	9.2201 ppb	10:13:27
3	Cd 226.502†	291.9	421.5	1.3772	µg/L	1.3772 ppb	10:13:27
3	Co 228.616†	258.5	298.4	8.2487	µg/L	8.2487 ppb	10:13:48
3	Cr 267.716†	4455.8	4449.7	103.24	µg/L	103.24 ppb	10:13:27
3	Cu 324.752†	6479.6	2682.1	33.819	µg/L	33.819 ppb	10:13:27
3	Mn 257.610†	712019.8	698000.6	2591.4	µg/L	2591.4 ppb	10:13:22
3	Mo 202.031†	94.8	75.8	13.247	µg/L	13.247 ppb	10:13:48
3	Ni 231.604†	1431.1	1067.1	68.493	µg/L	68.493 ppb	10:13:48
3	P 214.914†	652.6	437.1	974.58	µg/L	974.58 ppb	10:13:48
3	Pb 220.353†	168.1	108.8	30.086	µg/L	30.086 ppb	10:13:48
3	S 181.975 Axial†	33.5	7.3	41.675	µg/L	41.675 ppb	10:13:48
3	Sb 206.836†	25.4	2.5	1.3015	µg/L	1.3015 ppb	10:13:48
3	Se 196.026†	-222.2	-230.2	11.742	µg/L	11.742 ppb	10:13:48
3	SiO2†	348128.5	338902.6	71533	µg/L	71533 ppb	10:13:22
3	Si 251.611†	401914.9	393589.9	33013	µg/L	33013 ppb	10:13:22
3	Sn 189.927†	-17.1	-40.2	-11.700	µg/L	-11.700 ppb	10:13:48
3	Ti 334.940†	1613990.2	1581008.4	3942.6	µg/L	3942.6 ppb	10:13:22
3	Tl 190.801†	-37.5	-13.7	15.926	µg/L	15.926 ppb	10:13:48
3	U 409.014†	-1526.8	-1263.4	-134.65	µg/L	-134.65 ppb	10:13:22
3	V 292.402†	4337.7	4373.3	59.773	µg/L	59.773 ppb	10:13:27
3	Zn 213.857†	15128.7	14155.5	407.35	µg/L	407.35 ppb	10:13:27

Mean Data: 244228003|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1983941.9	102.09	%	0.286				0.28%
Sc RADIAL	78423.5	102	%	0.6				0.59%
Y 371.029	1342840.1	109.28	%	0.262				0.24%
Ag 328.068†	-845.6	-1.3067	µg/L	0.26758	-1.3067	ppb	0.26758	20.48%
Al 396.153Radial†	51277.0	35630	µg/L	55.9	35630	ppb	55.9	0.16%
As 188.979†	6.7	20.808	µg/L	1.6229	20.808	ppb	1.6229	7.80%
B 249.677†	1150.5	4.7099	µg/L	1.74643	4.7099	ppb	1.74643	37.08%
Ba 233.527†	9200.0	267.39	µg/L	4.379	267.39	ppb	4.379	1.64%
Be 313.107†	15739.5	9.4484	µg/L	0.21088	9.4484	ppb	0.21088	2.23%
Ca 317.933Radial†	9146.4	7202.0	µg/L	46.74	7202.0	ppb	46.74	0.65%
Cd 226.502†	435.6	1.7528	µg/L	0.32618	1.7528	ppb	0.32618	18.61%
Co 228.616†	312.3	8.9344	µg/L	0.60432	8.9344	ppb	0.60432	6.76%
Cr 267.716†	4564.4	105.90	µg/L	2.340	105.90	ppb	2.340	2.21%
Cu 324.752†	2731.2	34.236	µg/L	0.3838	34.236	ppb	0.3838	1.12%
Fe 238.204 Radial†	6865.7	98567	µg/L	650.7	98567	ppb	650.7	0.66%
K 766.490 Radial†	6647.1	4412.6	µg/L	25.78	4412.6	ppb	25.78	0.58%
Mg 279.077 IEC†	546.1	5845.8	µg/L	63.77	5845.8	ppb	63.77	1.09%
Mn 257.610†	703365.7	2611.3	µg/L	17.35	2611.3	ppb	17.35	0.66%
Mo 202.031†	80.6	13.864	µg/L	0.5410	13.864	ppb	0.5410	3.90%
Na 589.592 Radial†	4166.6	1196.5	µg/L	2.30	1196.5	ppb	2.30	0.19%

Ni 231.604†	1097.4	70.406 µg/L	1.6568	70.406 ppb	1.6568	2.35%
P 214.914†	446.8	997.51 µg/L	19.906	997.51 ppb	19.906	2.00%
Pb 220.353†	116.1	32.194 µg/L	1.8266	32.194 ppb	1.8266	5.67%
S 181.975 Axial†	8.8	50.318 µg/L	7.6928	50.318 ppb	7.6928	15.29%
Sb 206.836†	4.5	3.4742 µg/L	2.07120	3.4742 ppb	2.07120	59.62%
Se 196.026†	-244.3	-9.1624 µg/L	18.97340	-9.1624 ppb	18.97340	207.08%
SiO2†	340820.1	71938 µg/L	364.2	71938 ppb	364.2	0.51%
Si 251.611†	395853.7	33203 µg/L	168.6	33203 ppb	168.6	0.51%
Sn 189.927†	-41.8	-12.620 µg/L	2.2709	-12.620 ppb	2.2709	17.99%
Sr 421.552†	6775.2	43.049 µg/L	0.1887	43.049 ppb	0.1887	0.44%
Ti 334.940†	1597024.6	3982.6 µg/L	34.92	3982.6 ppb	34.92	0.88%
Tl 190.801†	-19.5	6.4077 µg/L	8.93728	6.4077 ppb	8.93728	139.48%
U 409.014†	-1301.8	-138.37 µg/L	7.407	-138.37 ppb	7.407	5.35%
V 292.402†	4455.9	60.825 µg/L	0.9171	60.825 ppb	0.9171	1.51%
Zn 213.857†	14358.5	413.24 µg/L	5.321	413.24 ppb	5.321	1.29%

Sequence No.: 13
Sample ID: 244228004|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 311
Date Collected: 1/27/2010 10:13:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228004|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77688.5	77688.5	101	%			10:14:30
1	Al 396.153Radial†	58513.2	57886.7	40222	µg/L	40222	ppb	10:14:30
1	Ca 317.933Radial†	16650.6	16212.8	12766	µg/L	12766	ppb	10:14:30
1	Fe 238.204 Radial†	15634.2	15443.5	221710	µg/L	221710	ppb	10:14:51
1	K 766.490 Radial†	12242.5	11693.6	7762.6	µg/L	7762.6	ppb	10:14:30
1	Mg 279.077 IEC†	923.2	904.6	9621.3	µg/L	9621.3	ppb	10:14:51
1	Na 589.592 Radial†	3415.7	2832.6	813.41	µg/L	813.41	ppb	10:14:30
1	Sr 421.552†	13336.0	12629.2	80.245	µg/L	80.245	ppb	10:14:30
1	Sc 361.383	1977159.5	1977159.5	101.74	%			10:15:55
1	Y 371.029	1281650.3	1281650.3	104.30	%			10:15:55
1	Ag 328.068†	-1902.3	-1814.8	-1.3789	µg/L	-1.3789	ppb	10:16:01
1	As 188.979†	2.2	1.6	15.921	µg/L	15.921	ppb	10:16:22
1	B 249.677†	2675.9	2515.0	6.8143	µg/L	6.8143	ppb	10:16:01
1	Ba 233.527†	15848.1	15591.9	453.42	µg/L	453.42	ppb	10:16:01
1	Be 313.107†	20668.4	16476.0	7.5075	µg/L	7.5075	ppb	10:16:01
1	Cd 226.502†	842.1	963.2	3.3528	µg/L	3.3528	ppb	10:16:01
1	Co 228.616†	1100.8	1127.0	40.462	µg/L	40.462	ppb	10:16:22
1	Cr 267.716†	4001.6	4016.1	93.301	µg/L	93.301	ppb	10:16:01
1	Cu 324.752†	4351.9	609.3	35.400	µg/L	35.400	ppb	10:16:01
1	Mn 257.610†	1148460.9	1129037.1	4200.0	µg/L	4200.0	ppb	10:15:55
1	Mo 202.031†	162.9	142.9	26.378	µg/L	26.378	ppb	10:16:22
1	Ni 231.604†	1181.5	825.9	54.844	µg/L	54.844	ppb	10:16:22
1	P 214.914†	1232.4	1008.9	2245.4	µg/L	2245.4	ppb	10:16:22
1	Pb 220.353†	376.5	314.1	85.562	µg/L	85.562	ppb	10:16:22
1	S 181.975 Axial†	106.1	78.8	451.63	µg/L	451.63	ppb	10:16:22
1	Sb 206.836†	16.0	-6.7	-9.0427	µg/L	-9.0427	ppb	10:16:22
1	Se 196.026†	-567.2	-570.0	-52.425	µg/L	-52.425	ppb	10:16:22
1	SiO2†	349986.0	341730.2	72130	µg/L	72130	ppb	10:16:01
1	Si 251.611†	404026.2	396821.8	33284	µg/L	33284	ppb	10:16:01
1	Sn 189.927†	-95.5	-117.3	-43.344	µg/L	-43.344	ppb	10:16:22
1	Ti 334.940†	4253132.5	4179724.2	10424	µg/L	10424	ppb	10:15:55
1	Tl 190.801†	-69.3	-45.0	18.259	µg/L	18.259	ppb	10:16:01
1	U 409.014†	-1590.4	-1330.3	-158.54	µg/L	-158.54	ppb	10:16:01
1	V 292.402†	19336.7	19128.6	249.83	µg/L	249.83	ppb	10:16:01
1	Zn 213.857†	31261.0	30055.8	864.90	µg/L	864.90	ppb	10:16:01
2	Sc RADIAL	77706.4	77706.4	101	%			10:14:56
2	Al 396.153Radial†	58917.7	58273.3	40491	µg/L	40491	ppb	10:14:56
2	Ca 317.933Radial†	16721.9	16279.5	12819	µg/L	12819	ppb	10:14:56
2	Fe 238.204 Radial†	15655.7	15461.2	221970	µg/L	221970	ppb	10:15:16
2	K 766.490 Radial†	12242.7	11691.0	7760.9	µg/L	7760.9	ppb	10:14:56
2	Mg 279.077 IEC†	917.3	898.5	9554.8	µg/L	9554.8	ppb	10:15:16
2	Na 589.592 Radial†	3464.9	2880.4	827.16	µg/L	827.16	ppb	10:14:56
2	Sr 421.552†	13392.4	12681.9	80.580	µg/L	80.580	ppb	10:14:56
2	Sc 361.383	1985890.5	1985890.5	102.19	%			10:16:30
2	Y 371.029	1287241.9	1287241.9	104.76	%			10:16:30
2	Ag 328.068†	-1862.2	-1767.3	-0.9231	µg/L	-0.9231	ppb	10:16:36
2	As 188.979†	9.5	8.8	32.413	µg/L	32.413	ppb	10:16:56
2	B 249.677†	2714.1	2540.8	7.9337	µg/L	7.9337	ppb	10:16:36
2	Ba 233.527†	15855.9	15531.1	451.65	µg/L	451.65	ppb	10:16:36
2	Be 313.107†	20629.0	16348.2	7.4187	µg/L	7.4187	ppb	10:16:36
2	Cd 226.502†	800.4	918.7	2.0145	µg/L	2.0145	ppb	10:16:36
2	Co 228.616†	1096.5	1118.0	39.967	µg/L	39.967	ppb	10:16:56
2	Cr 267.716†	3969.0	3966.9	92.158	µg/L	92.158	ppb	10:16:36
2	Cu 324.752†	4251.9	492.7	34.558	µg/L	34.558	ppb	10:16:36
2	Mn 257.610†	1153520.0	1129024.9	4200.0	µg/L	4200.0	ppb	10:16:30
2	Mo 202.031†	149.5	129.1	24.650	µg/L	24.650	ppb	10:16:56
2	Ni 231.604†	1189.6	828.8	55.029	µg/L	55.029	ppb	10:16:56
2	P 214.914†	1223.0	994.3	2210.5	µg/L	2210.5	ppb	10:16:56
2	Pb 220.353†	376.4	312.4	85.069	µg/L	85.069	ppb	10:16:56

2	S 181.975 Axial†	100.7	73.0	418.66	µg/L	418.66 ppb	10:16:56
2	Sb 206.836†	22.8	-0.1	-1.7498	µg/L	-1.7498 ppb	10:16:56
2	Se 196.026†	-555.6	-556.2	-29.572	µg/L	-29.572 ppb	10:16:56
2	SiO2†	349985.6	340217.3	71811	µg/L	71811 ppb	10:16:36
2	Si 251.611†	404283.6	395327.7	33159	µg/L	33159 ppb	10:16:36
2	Sn 189.927†	-103.3	-124.5	-47.554	µg/L	-47.554 ppb	10:16:56
2	Ti 334.940†	4271620.6	4179437.0	10423	µg/L	10423 ppb	10:16:30
2	Tl 190.801†	-88.2	-63.2	-13.139	µg/L	-13.139 ppb	10:16:36
2	U 409.014†	-1667.1	-1398.5	-165.09	µg/L	-165.09 ppb	10:16:36
2	V 292.402†	19389.9	19097.1	249.43	µg/L	249.43 ppb	10:16:36
2	Zn 213.857†	31338.4	29996.5	863.16	µg/L	863.16 ppb	10:16:36
3	Sc RADIAL	78393.3	78393.3	102	%		10:15:22
3	Al 396.153Radial†	59385.5	58221.4	40455	µg/L	40455 ppb	10:15:22
3	Ca 317.933Radial†	16896.9	16306.1	12840	µg/L	12840 ppb	10:15:22
3	Fe 238.204 Radial†	15655.3	15325.2	220020	µg/L	220020 ppb	10:15:42
3	K 766.490 Radial†	12389.5	11728.8	7786.0	µg/L	7786.0 ppb	10:15:22
3	Mg 279.077 IEC†	922.7	895.9	9527.9	µg/L	9527.9 ppb	10:15:42
3	Na 589.592 Radial†	3468.9	2854.3	819.65	µg/L	819.65 ppb	10:15:22
3	Sr 421.552†	13487.8	12659.3	80.436	µg/L	80.436 ppb	10:15:22
3	Sc 361.383	1989136.2	1989136.2	102.35	%		10:17:04
3	Y 371.029	1289482.1	1289482.1	104.94	%		10:17:04
3	Ag 328.068†	-1870.5	-1772.4	-1.1485	µg/L	-1.1485 ppb	10:17:10
3	As 188.979†	3.8	3.2	19.422	µg/L	19.422 ppb	10:17:31
3	B 249.677†	2655.9	2479.6	5.9730	µg/L	5.9730 ppb	10:17:10
3	Ba 233.527†	15450.9	15110.1	439.41	µg/L	439.41 ppb	10:17:10
3	Be 313.107†	20104.6	15802.9	7.1182	µg/L	7.1182 ppb	10:17:10
3	Cd 226.502†	824.3	940.8	2.8800	µg/L	2.8800 ppb	10:17:10
3	Co 228.616†	1017.1	1038.7	36.024	µg/L	36.024 ppb	10:17:31
3	Cr 267.716†	3848.3	3842.6	89.272	µg/L	89.272 ppb	10:17:10
3	Cu 324.752†	4350.6	582.3	34.961	µg/L	34.961 ppb	10:17:10
3	Mn 257.610†	1134968.5	1109058.1	4126.0	µg/L	4126.0 ppb	10:17:04
3	Mo 202.031†	144.7	124.2	23.955	µg/L	23.955 ppb	10:17:31
3	Ni 231.604†	1119.2	758.0	50.552	µg/L	50.552 ppb	10:17:31
3	P 214.914†	1166.7	937.4	2076.0	µg/L	2076.0 ppb	10:17:31
3	Pb 220.353†	353.5	289.4	78.435	µg/L	78.435 ppb	10:17:31
3	S 181.975 Axial†	90.8	63.2	362.01	µg/L	362.01 ppb	10:17:31
3	Sb 206.836†	27.0	4.0	2.8448	µg/L	2.8448 ppb	10:17:31
3	Se 196.026†	-520.4	-520.8	18.759	µg/L	18.759 ppb	10:17:31
3	SiO2†	343784.7	333600.2	70414	µg/L	70414 ppb	10:17:10
3	Si 251.611†	396934.9	387502.4	32502	µg/L	32502 ppb	10:17:10
3	Sn 189.927†	-84.8	-106.3	-37.093	µg/L	-37.093 ppb	10:17:31
3	Ti 334.940†	4193030.2	4095833.2	10214	µg/L	10214 ppb	10:17:04
3	Tl 190.801†	-66.8	-42.2	21.172	µg/L	21.172 ppb	10:17:10
3	U 409.014†	-1601.8	-1332.0	-158.47	µg/L	-158.47 ppb	10:17:10
3	V 292.402†	18735.4	18426.7	240.99	µg/L	240.99 ppb	10:17:10
3	Zn 213.857†	30641.3	29265.4	841.96	µg/L	841.96 ppb	10:17:10

Mean Data: 244228004|940165|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1984062.1	102.09	%	0.319				0.31%
Sc RADIAL	77929.4	101	%	0.5				0.52%
Y 371.029	1286124.8	104.67	%	0.328				0.31%
Ag 328.068†	-1784.8	-1.1502	µg/L	0.22792	-1.1502	ppb	0.22792	19.82%
Al 396.153Radial†	58127.2	40389	µg/L	145.8	40389	ppb	145.8	0.36%
As 188.979†	4.5	22.585	µg/L	8.6895	22.585	ppb	8.6895	38.47%
B 249.677†	2511.8	6.9070	µg/L	0.98362	6.9070	ppb	0.98362	14.24%
Ba 233.527†	15411.0	448.16	µg/L	7.632	448.16	ppb	7.632	1.70%
Be 313.107†	16209.0	7.3481	µg/L	0.20400	7.3481	ppb	0.20400	2.78%
Ca 317.933Radial†	16266.1	12808	µg/L	37.8	12808	ppb	37.8	0.30%
Cd 226.502†	940.9	2.7491	µg/L	0.67870	2.7491	ppb	0.67870	24.69%
Co 228.616†	1094.6	38.818	µg/L	2.4320	38.818	ppb	2.4320	6.27%
Cr 267.716†	3941.9	91.577	µg/L	2.0764	91.577	ppb	2.0764	2.27%
Cu 324.752†	561.4	34.973	µg/L	0.4210	34.973	ppb	0.4210	1.20%
Fe 238.204 Radial†	15409.9	221230	µg/L	1061.5	221230	ppb	1061.5	0.48%
K 766.490 Radial†	11704.4	7769.8	µg/L	14.00	7769.8	ppb	14.00	0.18%
Mg 279.077 IEC†	899.7	9568.0	µg/L	48.09	9568.0	ppb	48.09	0.50%
Mn 257.610†	1122373.4	4175.3	µg/L	42.74	4175.3	ppb	42.74	1.02%
Mo 202.031†	132.1	24.994	µg/L	1.2478	24.994	ppb	1.2478	4.99%
Na 589.592 Radial†	2855.8	820.07	µg/L	6.886	820.07	ppb	6.886	0.84%

Ni 231.604†	804.2	53.475	µg/L	2.5333	53.475	ppb	2.5333	4.74%
P 214.914†	980.2	2177.3	µg/L	89.48	2177.3	ppb	89.48	4.11%
Pb 220.353†	305.3	83.022	µg/L	3.9799	83.022	ppb	3.9799	4.79%
S 181.975 Axial†	71.7	410.77	µg/L	45.325	410.77	ppb	45.325	11.03%
Sb 206.836†	-0.9	-2.6492	µg/L	5.99459	-2.6492	ppb	5.99459	226.28%
Se 196.026†	-549.0	-21.079	µg/L	36.3440	-21.079	ppb	36.3440	172.42%
SiO2†	338515.9	71452	µg/L	912.6	71452	ppb	912.6	1.28%
Si 251.611†	393217.3	32982	µg/L	419.8	32982	ppb	419.8	1.27%
Sn 189.927†	-116.0	-42.664	µg/L	5.2636	-42.664	ppb	5.2636	12.34%
Sr 421.552†	12656.8	80.420	µg/L	0.1680	80.420	ppb	0.1680	0.21%
Ti 334.940†	4151664.8	10354	µg/L	120.6	10354	ppb	120.6	1.16%
Tl 190.801†	-50.1	8.7640	µg/L	19.02401	8.7640	ppb	19.02401	217.07%
U 409.014†	-1353.6	-160.70	µg/L	3.799	-160.70	ppb	3.799	2.36%
V 292.402†	18884.2	246.75	µg/L	4.995	246.75	ppb	4.995	2.02%
Zn 213.857†	29772.6	856.67	µg/L	12.771	856.67	ppb	12.771	1.49%

Sequence No.: 14
Sample ID: 244228005|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 312
Date Collected: 1/27/2010 10:17:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228005|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77883.4	77883.4	101	%			10:18:13
1	Al 396.153Radial†	38405.9	37909.4	26341	µg/L	26341	ppb	10:18:13
1	Ca 317.933Radial†	7561.8	7206.8	5674.8	µg/L	5674.8	ppb	10:18:13
1	Fe 238.204 Radial†	5350.5	5261.5	75537	µg/L	75537	ppb	10:18:34
1	K 766.490 Radial†	6322.4	5824.0	3866.2	µg/L	3866.2	ppb	10:18:13
1	Mg 279.077 IEC†	383.1	369.5	3947.1	µg/L	3947.1	ppb	10:18:34
1	Na 589.592 Radial†	4833.8	4222.9	1212.6	µg/L	1212.6	ppb	10:18:13
1	Sr 421.552†	8301.7	7630.7	48.485	µg/L	48.485	ppb	10:18:13
1	Sc 361.383	1957557.9	1957557.9	100.73	%			10:19:38
1	Y 371.029	1277265.6	1277265.6	103.94	%			10:19:38
1	Ag 328.068†	-687.9	-627.8	-0.7854	µg/L	-0.7854	ppb	10:19:44
1	As 188.979†	11.4	10.7	28.749	µg/L	28.749	ppb	10:20:04
1	B 249.677†	995.9	873.4	3.5599	µg/L	3.5599	ppb	10:19:44
1	Ba 233.527†	8133.2	8088.9	235.09	µg/L	235.09	ppb	10:19:44
1	Be 313.107†	12283.7	8355.4	4.7064	µg/L	4.7064	ppb	10:19:44
1	Cd 226.502†	189.7	323.8	1.1719	µg/L	1.1719	ppb	10:20:04
1	Co 228.616†	245.9	289.1	9.8844	µg/L	9.8844	ppb	10:20:04
1	Cr 267.716†	13008.0	12996.7	301.48	µg/L	301.48	ppb	10:19:44
1	Cu 324.752†	6033.2	2321.4	27.953	µg/L	27.953	ppb	10:19:44
1	Mn 257.610†	436139.2	433173.0	1610.1	µg/L	1610.1	ppb	10:19:38
1	Mo 202.031†	311.2	291.8	39.519	µg/L	39.519	ppb	10:20:04
1	Ni 231.604†	3148.2	2790.0	176.75	µg/L	176.75	ppb	10:20:04
1	P 214.914†	424.3	218.7	467.78	µg/L	467.78	ppb	10:20:04
1	Pb 220.353†	211.0	153.5	43.494	µg/L	43.494	ppb	10:20:04
1	S 181.975 Axial†	79.9	53.8	308.35	µg/L	308.35	ppb	10:20:04
1	Sb 206.836†	29.1	6.5	4.0333	µg/L	4.0333	ppb	10:20:04
1	Se 196.026†	-175.9	-187.1	-6.6008	µg/L	-6.6008	ppb	10:20:04
1	SiO2†	291846.7	287456.2	60674	µg/L	60674	ppb	10:19:38
1	Si 251.611†	336454.8	333715.9	27991	µg/L	27991	ppb	10:19:38
1	Sn 189.927†	-7.6	-31.0	-9.1091	µg/L	-9.1091	ppb	10:20:04
1	Ti 334.940†	1182694.4	1173363.2	2926.1	µg/L	2926.1	ppb	10:19:38
1	Tl 190.801†	-35.8	-12.4	6.4712	µg/L	6.4712	ppb	10:20:04
1	U 409.014†	-967.7	-727.8	-80.296	µg/L	-80.296	ppb	10:19:38
1	V 292.402†	3659.4	3755.1	51.602	µg/L	51.602	ppb	10:19:44
1	Zn 213.857†	11524.2	10769.5	309.35	µg/L	309.35	ppb	10:19:44
2	Sc RADIAL	77414.9	77414.9	101	%			10:18:39
2	Al 396.153Radial†	38379.3	38112.2	26481	µg/L	26481	ppb	10:18:39
2	Ca 317.933Radial†	7559.3	7249.5	5708.4	µg/L	5708.4	ppb	10:18:39
2	Fe 238.204 Radial†	5352.2	5295.1	76019	µg/L	76019	ppb	10:18:59
2	K 766.490 Radial†	6302.5	5842.1	3878.2	µg/L	3878.2	ppb	10:18:39
2	Mg 279.077 IEC†	380.7	369.4	3945.3	µg/L	3945.3	ppb	10:18:59
2	Na 589.592 Radial†	4799.8	4218.0	1211.3	µg/L	1211.3	ppb	10:18:39
2	Sr 421.552†	8269.9	7648.7	48.599	µg/L	48.599	ppb	10:18:39
2	Sc 361.383	1962250.4	1962250.4	100.97	%			10:20:12
2	Y 371.029	1280157.1	1280157.1	104.18	%			10:20:12
2	Ag 328.068†	-746.1	-683.8	-1.2749	µg/L	-1.2749	ppb	10:20:18
2	As 188.979†	9.5	8.8	24.456	µg/L	24.456	ppb	10:20:38
2	B 249.677†	1027.5	902.4	4.7150	µg/L	4.7150	ppb	10:20:18
2	Ba 233.527†	8126.5	8063.0	234.34	µg/L	234.34	ppb	10:20:18
2	Be 313.107†	12273.5	8316.1	4.6783	µg/L	4.6783	ppb	10:20:18
2	Cd 226.502†	187.0	320.7	1.0248	µg/L	1.0248	ppb	10:20:38
2	Co 228.616†	248.7	291.3	10.001	µg/L	10.001	ppb	10:20:38
2	Cr 267.716†	13022.3	12980.0	301.09	µg/L	301.09	ppb	10:20:18
2	Cu 324.752†	6008.9	2283.0	27.732	µg/L	27.732	ppb	10:20:18
2	Mn 257.610†	437553.4	433538.2	1611.5	µg/L	1611.5	ppb	10:20:12
2	Mo 202.031†	322.0	301.7	40.783	µg/L	40.783	ppb	10:20:38
2	Ni 231.604†	3137.7	2772.2	175.63	µg/L	175.63	ppb	10:20:38
2	P 214.914†	415.7	209.2	444.72	µg/L	444.72	ppb	10:20:38
2	Pb 220.353†	198.5	140.6	39.731	µg/L	39.731	ppb	10:20:38

2	S 181.975 Axial†	84.3	58.0	332.55 µg/L	332.55 ppb	10:20:38
2	Sb 206.836†	24.3	1.7	-1.2909 µg/L	-1.2909 ppb	10:20:38
2	Se 196.026†	-183.2	-193.8	-15.376 µg/L	-15.376 ppb	10:20:38
2	SiO2†	292591.8	287501.3	60684 µg/L	60684 ppb	10:20:12
2	Si 251.611†	337557.8	334009.5	28016 µg/L	28016 ppb	10:20:12
2	Sn 189.927†	-8.2	-31.5	-9.3769 µg/L	-9.3769 ppb	10:20:38
2	Ti 334.940†	1186239.3	1174066.3	2927.9 µg/L	2927.9 ppb	10:20:12
2	Tl 190.801†	-40.8	-17.4	-2.0278 µg/L	-2.0278 ppb	10:20:38
2	U 409.014†	-981.7	-739.3	-81.464 µg/L	-81.464 ppb	10:20:12
2	V 292.402†	3693.2	3779.8	51.943 µg/L	51.943 ppb	10:20:18
2	Zn 213.857†	11524.5	10742.5	308.54 µg/L	308.54 ppb	10:20:18
3	Sc RADIAL	77847.5	77847.5	101 %		10:19:05
3	Al 396.153Radial†	38739.3	38255.8	26581 µg/L	26581 ppb	10:19:05
3	Ca 317.933Radial†	7647.2	7294.6	5743.9 µg/L	5743.9 ppb	10:19:05
3	Fe 238.204 Radial†	5327.6	5241.4	75248 µg/L	75248 ppb	10:19:26
3	K 766.490 Radial†	6394.9	5898.5	3915.7 µg/L	3915.7 ppb	10:19:05
3	Mg 279.077 IEC†	386.8	373.4	3989.5 µg/L	3989.5 ppb	10:19:26
3	Na 589.592 Radial†	4864.6	4255.4	1222.0 µg/L	1222.0 ppb	10:19:05
3	Sr 421.552†	8360.7	7692.6	48.878 µg/L	48.878 ppb	10:19:05
3	Sc 361.383	1977368.3	1977368.3	101.75 %		10:20:46
3	Y 371.029	1288497.8	1288497.8	104.86 %		10:20:46
3	Ag 328.068†	-657.3	-591.0	-0.4724 µg/L	-0.4724 ppb	10:20:52
3	As 188.979†	12.8	12.0	31.692 µg/L	31.692 ppb	10:21:12
3	B 249.677†	965.4	833.7	1.7548 µg/L	1.7548 ppb	10:20:52
3	Ba 233.527†	7995.3	7872.5	228.80 µg/L	228.80 ppb	10:20:52
3	Be 313.107†	12090.2	8043.0	4.5082 µg/L	4.5082 ppb	10:20:52
3	Cd 226.502†	167.1	299.7	0.4800 µg/L	0.4800 ppb	10:21:12
3	Co 228.616†	242.6	283.5	9.6753 µg/L	9.6753 ppb	10:21:12
3	Cr 267.716†	12586.1	12452.6	288.86 µg/L	288.86 ppb	10:20:52
3	Cu 324.752†	5992.8	2221.6	27.163 µg/L	27.163 ppb	10:20:52
3	Mn 257.610†	434973.2	427689.1	1589.8 µg/L	1589.8 ppb	10:20:46
3	Mo 202.031†	287.9	265.8	36.241 µg/L	36.241 ppb	10:21:12
3	Ni 231.604†	2961.3	2575.0	163.20 µg/L	163.20 ppb	10:21:12
3	P 214.914†	421.5	211.8	451.61 µg/L	451.61 ppb	10:21:12
3	Pb 220.353†	191.2	131.9	37.215 µg/L	37.215 ppb	10:21:12
3	S 181.975 Axial†	81.7	54.8	314.21 µg/L	314.21 ppb	10:21:12
3	Sb 206.836†	27.4	4.5	1.8635 µg/L	1.8635 ppb	10:21:12
3	Se 196.026†	-167.6	-177.1	8.0341 µg/L	8.0341 ppb	10:21:12
3	SiO2†	291735.8	284444.5	60039 µg/L	60039 ppb	10:20:46
3	Si 251.611†	336287.1	330204.6	27696 µg/L	27696 ppb	10:20:46
3	Sn 189.927†	-5.4	-28.8	-7.8154 µg/L	-7.8154 ppb	10:21:12
3	Ti 334.940†	1173882.0	1152939.0	2875.2 µg/L	2875.2 ppb	10:20:46
3	Tl 190.801†	-35.5	-11.8	7.1066 µg/L	7.1066 ppb	10:21:12
3	U 409.014†	-934.1	-685.1	-76.187 µg/L	-76.187 ppb	10:20:46
3	V 292.402†	3542.0	3603.2	49.649 µg/L	49.649 ppb	10:20:52
3	Zn 213.857†	11282.6	10417.5	299.16 µg/L	299.16 ppb	10:20:52

Mean Data: 244228005|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1965725.5	101.15	%	0.533				0.53%
Sc RADIAL	77715.2	101	%	0.3				0.34%
Y 371.029	1281973.5	104.33	%	0.475				0.45%
Ag 328.068†	-634.2	-0.8442	µg/L	0.40449	-0.8442	ppb	0.40449	47.91%
Al 396.153Radial†	38092.5	26468	µg/L	121.0	26468	ppb	121.0	0.46%
As 188.979†	10.5	28.299	µg/L	3.6391	28.299	ppb	3.6391	12.86%
B 249.677†	869.8	3.3433	µg/L	1.49199	3.3433	ppb	1.49199	44.63%
Ba 233.527†	8008.1	232.74	µg/L	3.436	232.74	ppb	3.436	1.48%
Be 313.107†	8238.2	4.6310	µg/L	0.10727	4.6310	ppb	0.10727	2.32%
Ca 317.933Radial†	7250.3	5709.1	µg/L	34.55	5709.1	ppb	34.55	0.61%
Cd 226.502†	314.7	0.8923	µg/L	0.36451	0.8923	ppb	0.36451	40.85%
Co 228.616†	288.0	9.8536	µg/L	0.16515	9.8536	ppb	0.16515	1.68%
Cr 267.716†	12809.8	297.14	µg/L	7.178	297.14	ppb	7.178	2.42%
Cu 324.752†	2275.3	27.616	µg/L	0.4076	27.616	ppb	0.4076	1.48%
Fe 238.204 Radial†	5266.0	75601	µg/L	389.8	75601	ppb	389.8	0.52%
K 766.490 Radial†	5854.9	3886.7	µg/L	25.79	3886.7	ppb	25.79	0.66%
Mg 279.077 IEC†	370.8	3960.6	µg/L	25.00	3960.6	ppb	25.00	0.63%
Mn 257.610†	431466.8	1603.8	µg/L	12.15	1603.8	ppb	12.15	0.76%
Mo 202.031†	286.4	38.848	µg/L	2.3442	38.848	ppb	2.3442	6.03%
Na 589.592 Radial†	4232.1	1215.3	µg/L	5.84	1215.3	ppb	5.84	0.48%

Ni 231.604†	2712.4	171.86 µg/L	7.522	171.86 ppb	7.522	4.38%
P 214.914†	213.2	454.70 µg/L	11.837	454.70 ppb	11.837	2.60%
Pb 220.353†	142.0	40.147 µg/L	3.1603	40.147 ppb	3.1603	7.87%
S 181.975 Axial†	55.5	318.37 µg/L	12.625	318.37 ppb	12.625	3.97%
Sb 206.836†	4.2	1.5353 µg/L	2.67724	1.5353 ppb	2.67724	174.38%
Se 196.026†	-186.0	-4.6475 µg/L	11.82658	-4.6475 ppb	11.82658	254.47%
SiO2†	286467.3	60466 µg/L	369.8	60466 ppb	369.8	0.61%
Si 251.611†	332643.3	27901 µg/L	177.6	27901 ppb	177.6	0.64%
Sn 189.927†	-30.4	-8.7672 µg/L	0.83501	-8.7672 ppb	0.83501	9.52%
Sr 421.552†	7657.3	48.654 µg/L	0.2025	48.654 ppb	0.2025	0.42%
Ti 334.940†	1166789.5	2909.7 µg/L	29.93	2909.7 ppb	29.93	1.03%
Tl 190.801†	-13.9	3.8500 µg/L	5.10022	3.8500 ppb	5.10022	132.47%
U 409.014†	-717.4	-79.315 µg/L	2.7716	-79.315 ppb	2.7716	3.49%
V 292.402†	3712.7	51.065 µg/L	1.2381	51.065 ppb	1.2381	2.42%
Zn 213.857†	10643.1	305.68 µg/L	5.665	305.68 ppb	5.665	1.85%

Sequence No.: 15
Sample ID: 244228006|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 313
Date Collected: 1/27/2010 10:21:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228006|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	77492.5	77492.5	101	%			10:21:54
1	Al 396.153Radial†	49971.2	49565.3	34440	µg/L	34440	ppb	10:21:54
1	Ca 317.933Radial†	13557.8	13188.5	10385	µg/L	10385	ppb	10:22:14
1	Fe 238.204 Radial†	5411.9	5349.1	76794	µg/L	76794	ppb	10:22:14
1	K 766.490 Radial†	9613.0	9117.5	6052.6	µg/L	6052.6	ppb	10:21:54
1	Mg 279.077 IEC†	686.2	672.0	7241.3	µg/L	7241.3	ppb	10:22:14
1	Na 589.592 Radial†	2288.4	1723.6	494.95	µg/L	494.95	ppb	10:21:54
1	Sr 421.552†	13142.3	12470.5	79.236	µg/L	79.236	ppb	10:21:54
1	Sc 361.383	1966827.1	1966827.1	101.21	%			10:23:19
1	Y 371.029	1269809.6	1269809.6	103.34	%			10:23:19
1	Ag 328.068†	-718.0	-654.3	-0.7496	µg/L	-0.7496	ppb	10:23:24
1	As 188.979†	9.3	8.7	23.877	µg/L	23.877	ppb	10:23:45
1	B 249.677†	1159.8	1030.7	10.313	µg/L	10.313	ppb	10:23:24
1	Ba 233.527†	16208.7	16030.2	465.87	µg/L	465.87	ppb	10:23:24
1	Be 313.107†	12530.1	8541.4	4.9520	µg/L	4.9520	ppb	10:23:24
1	Cd 226.502†	221.3	354.1	1.8238	µg/L	1.8238	ppb	10:23:45
1	Co 228.616†	355.9	396.7	16.428	µg/L	16.428	ppb	10:23:45
1	Cr 267.716†	6437.0	6443.1	149.49	µg/L	149.49	ppb	10:23:24
1	Cu 324.752†	9353.2	5573.6	52.581	µg/L	52.581	ppb	10:23:24
1	Mn 257.610†	561797.9	555294.0	2061.3	µg/L	2061.3	ppb	10:23:19
1	Mo 202.031†	53.7	35.8	7.4189	µg/L	7.4189	ppb	10:23:45
1	Ni 231.604†	1577.5	1223.2	78.043	µg/L	78.043	ppb	10:23:45
1	P 214.914†	553.9	344.8	768.27	µg/L	768.27	ppb	10:23:45
1	Pb 220.353†	368.3	308.0	88.746	µg/L	88.746	ppb	10:23:45
1	S 181.975 Axial†	100.1	73.4	420.49	µg/L	420.49	ppb	10:23:45
1	Sb 206.836†	25.4	2.7	0.7041	µg/L	0.7041	ppb	10:23:45
1	Se 196.026†	-193.1	-203.2	-27.445	µg/L	-27.445	ppb	10:23:45
1	SiO2†	303091.6	297201.7	62731	µg/L	62731	ppb	10:23:19
1	Si 251.611†	349583.4	345113.8	28947	µg/L	28947	ppb	10:23:19
1	Sn 189.927†	-27.7	-50.8	-18.890	µg/L	-18.890	ppb	10:23:45
1	Ti 334.940†	1064674.1	1051215.6	2621.3	µg/L	2621.3	ppb	10:23:19
1	Tl 190.801†	-37.6	-14.1	2.1568	µg/L	2.1568	ppb	10:23:45
1	U 409.014†	-248.8	-12.8	-12.532	µg/L	-12.532	ppb	10:23:19
1	V 292.402†	6187.5	6235.9	81.990	µg/L	81.990	ppb	10:23:24
1	Zn 213.857†	11597.3	10787.8	310.03	µg/L	310.03	ppb	10:23:24
2	Sc RADIAL	76999.2	76999.2	100	%			10:22:20
2	Al 396.153Radial†	49998.7	49910.1	34680	µg/L	34680	ppb	10:22:20
2	Ca 317.933Radial†	13577.1	13293.8	10468	µg/L	10468	ppb	10:22:40
2	Fe 238.204 Radial†	5421.1	5392.6	77419	µg/L	77419	ppb	10:22:40
2	K 766.490 Radial†	9656.2	9221.7	6121.7	µg/L	6121.7	ppb	10:22:20
2	Mg 279.077 IEC†	686.4	676.5	7289.7	µg/L	7289.7	ppb	10:22:40
2	Na 589.592 Radial†	2273.1	1722.8	494.74	µg/L	494.74	ppb	10:22:20
2	Sr 421.552†	13068.2	12480.0	79.297	µg/L	79.297	ppb	10:22:20
2	Sc 361.383	1959525.8	1959525.8	100.83	%			10:23:53
2	Y 371.029	1265666.1	1265666.1	103.00	%			10:23:53
2	Ag 328.068†	-741.8	-680.6	-0.9531	µg/L	-0.9531	ppb	10:23:58
2	As 188.979†	7.5	6.9	19.771	µg/L	19.771	ppb	10:24:18
2	B 249.677†	1130.2	1005.6	8.7643	µg/L	8.7643	ppb	10:23:58
2	Ba 233.527†	16123.4	16005.1	465.14	µg/L	465.14	ppb	10:23:58
2	Be 313.107†	12535.3	8592.7	4.9857	µg/L	4.9857	ppb	10:23:58
2	Cd 226.502†	207.0	340.7	1.3589	µg/L	1.3589	ppb	10:24:18
2	Co 228.616†	356.4	398.5	16.513	µg/L	16.513	ppb	10:24:18
2	Cr 267.716†	6355.4	6385.8	148.16	µg/L	148.16	ppb	10:23:58
2	Cu 324.752†	9426.8	5681.0	53.475	µg/L	53.475	ppb	10:23:58
2	Mn 257.610†	560536.8	556111.6	2064.4	µg/L	2064.4	ppb	10:23:53
2	Mo 202.031†	36.7	19.2	5.3493	µg/L	5.3493	ppb	10:24:18
2	Ni 231.604†	1568.2	1219.9	77.841	µg/L	77.841	ppb	10:24:18
2	P 214.914†	550.2	343.2	763.84	µg/L	763.84	ppb	10:24:18
2	Pb 220.353†	372.0	313.0	90.195	µg/L	90.195	ppb	10:24:18

2	S 181.975 Axial†	106.1	79.7	457.12	µg/L	457.12 ppb	10:24:18
2	Sb 206.836†	33.0	10.3	9.0700	µg/L	9.0700 ppb	10:24:18
2	Se 196.026†	-188.9	-199.8	-19.615	µg/L	-19.615 ppb	10:24:18
2	SiO2†	302377.0	297608.8	62817	µg/L	62817 ppb	10:23:53
2	Si 251.611†	349129.1	345950.4	29017	µg/L	29017 ppb	10:23:53
2	Sn 189.927†	-23.8	-47.0	-16.591	µg/L	-16.591 ppb	10:24:18
2	Ti 334.940†	1062954.7	1053430.2	2626.8	µg/L	2626.8 ppb	10:23:53
2	Tl 190.801†	-34.4	-11.1	7.3707	µg/L	7.3707 ppb	10:24:18
2	U 409.014†	-329.4	-93.7	-20.343	µg/L	-20.343 ppb	10:23:53
2	V 292.402†	6189.1	6260.3	82.299	µg/L	82.299 ppb	10:23:58
2	Zn 213.857†	11583.3	10816.6	310.84	µg/L	310.84 ppb	10:23:58
3	Sc RADIAL	77556.0	77556.0	101	%		10:22:45
3	Al 396.153Radial†	50085.3	49637.8	34491	µg/L	34491 ppb	10:22:45
3	Ca 317.933Radial†	13536.6	13156.4	10360	µg/L	10360 ppb	10:23:06
3	Fe 238.204 Radial†	5413.9	5346.7	76759	µg/L	76759 ppb	10:23:06
3	K 766.490 Radial†	9592.7	9089.6	6034.0	µg/L	6034.0 ppb	10:22:45
3	Mg 279.077 IEC†	685.2	670.4	7223.7	µg/L	7223.7 ppb	10:23:06
3	Na 589.592 Radial†	2274.1	1707.5	490.35	µg/L	490.35 ppb	10:22:45
3	Sr 421.552†	13101.4	12419.3	78.911	µg/L	78.911 ppb	10:22:45
3	Sc 361.383	1981429.7	1981429.7	101.96	%		10:24:26
3	Y 371.029	1279146.0	1279146.0	104.10	%		10:24:26
3	Ag 328.068†	-741.3	-672.0	-0.9295	µg/L	-0.9295 ppb	10:24:32
3	As 188.979†	4.1	3.5	11.937	µg/L	11.937 ppb	10:24:53
3	B 249.677†	1132.5	995.6	8.6110	µg/L	8.6110 ppb	10:24:32
3	Ba 233.527†	15922.8	15631.6	454.28	µg/L	454.28 ppb	10:24:32
3	Be 313.107†	12350.9	8274.4	4.7861	µg/L	4.7861 ppb	10:24:32
3	Cd 226.502†	193.3	325.1	0.9672	µg/L	0.9672 ppb	10:24:53
3	Co 228.616†	335.2	373.8	15.273	µg/L	15.273 ppb	10:24:53
3	Cr 267.716†	6249.6	6212.5	144.14	µg/L	144.14 ppb	10:24:32
3	Cu 324.752†	9313.4	5466.5	51.771	µg/L	51.771 ppb	10:24:32
3	Mn 257.610†	555521.7	545047.2	2023.5	µg/L	2023.5 ppb	10:24:26
3	Mo 202.031†	36.8	18.9	5.2953	µg/L	5.2953 ppb	10:24:53
3	Ni 231.604†	1504.6	1140.3	72.819	µg/L	72.819 ppb	10:24:53
3	P 214.914†	536.7	323.9	718.42	µg/L	718.42 ppb	10:24:53
3	Pb 220.353†	357.4	294.6	84.843	µg/L	84.843 ppb	10:24:53
3	S 181.975 Axial†	96.2	68.9	394.76	µg/L	394.76 ppb	10:24:53
3	Sb 206.836†	27.3	4.4	2.5442	µg/L	2.5442 ppb	10:24:53
3	Se 196.026†	-169.6	-178.8	10.983	µg/L	10.983 ppb	10:24:53
3	SiO2†	300995.0	292938.3	61831	µg/L	61831 ppb	10:24:26
3	Si 251.611†	347144.8	340176.4	28533	µg/L	28533 ppb	10:24:26
3	Sn 189.927†	-22.4	-45.4	-15.776	µg/L	-15.776 ppb	10:24:53
3	Ti 334.940†	1051043.5	1030093.8	2568.6	µg/L	2568.6 ppb	10:24:26
3	Tl 190.801†	-37.0	-13.3	2.9884	µg/L	2.9884 ppb	10:24:53
3	U 409.014†	-219.3	17.9	-9.5967	µg/L	-9.5967 ppb	10:24:26
3	V 292.402†	6075.0	6080.5	80.031	µg/L	80.031 ppb	10:24:32
3	Zn 213.857†	11458.0	10566.8	303.61	µg/L	303.61 ppb	10:24:32

Mean Data: 244228006|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1969260.9	101.33	%	0.574				0.57%
Sc RADIAL	77349.2	101	%	0.4				0.39%
Y 371.029	1271540.5	103.48	%	0.562				0.54%
Ag 328.068†	-669.0	-0.8774	µg/L	0.11132	-0.8774	ppb	0.11132	12.69%
Al 396.153Radial†	49704.4	34537	µg/L	126.3	34537	ppb	126.3	0.37%
As 188.979†	6.3	18.528	µg/L	6.0663	18.528	ppb	6.0663	32.74%
B 249.677†	1010.6	9.2296	µg/L	0.94177	9.2296	ppb	0.94177	10.20%
Ba 233.527†	15889.0	461.76	µg/L	6.487	461.76	ppb	6.487	1.40%
Be 313.107†	8469.5	4.9079	µg/L	0.10686	4.9079	ppb	0.10686	2.18%
Ca 317.933Radial†	13212.9	10404	µg/L	56.6	10404	ppb	56.6	0.54%
Cd 226.502†	340.0	1.3833	µg/L	0.42883	1.3833	ppb	0.42883	31.00%
Co 228.616†	389.7	16.071	µg/L	0.6928	16.071	ppb	0.6928	4.31%
Cr 267.716†	6347.1	147.27	µg/L	2.786	147.27	ppb	2.786	1.89%
Cu 324.752†	5573.7	52.609	µg/L	0.8526	52.609	ppb	0.8526	1.62%
Fe 238.204 Radial†	5362.8	76991	µg/L	371.2	76991	ppb	371.2	0.48%
K 766.490 Radial†	9143.0	6069.4	µg/L	46.22	6069.4	ppb	46.22	0.76%
Mg 279.077 IEC†	672.9	7251.6	µg/L	34.18	7251.6	ppb	34.18	0.47%
Mn 257.610†	552150.9	2049.7	µg/L	22.81	2049.7	ppb	22.81	1.11%
Mo 202.031†	24.6	6.0212	µg/L	1.21073	6.0212	ppb	1.21073	20.11%
Na 589.592 Radial†	1718.0	493.35	µg/L	2.600	493.35	ppb	2.600	0.53%

Ni 231.604†	1194.5	76.235	µg/L	2.9595	76.235	ppb	2.9595	3.88%
P 214.914†	337.3	750.18	µg/L	27.590	750.18	ppb	27.590	3.68%
Pb 220.353†	305.2	87.928	µg/L	2.7682	87.928	ppb	2.7682	3.15%
S 181.975 Axial†	74.0	424.13	µg/L	31.340	424.13	ppb	31.340	7.39%
Sb 206.836†	5.8	4.1061	µg/L	4.39621	4.1061	ppb	4.39621	107.07%
Se 196.026†	-193.9	-12.026	µg/L	20.3069	-12.026	ppb	20.3069	168.86%
SiO2†	295916.3	62460	µg/L	546.1	62460	ppb	546.1	0.87%
Si 251.611†	343746.9	28832	µg/L	261.7	28832	ppb	261.7	0.91%
Sn 189.927†	-47.7	-17.086	µg/L	1.6148	-17.086	ppb	1.6148	9.45%
Sr 421.552†	12456.6	79.148	µg/L	0.2075	79.148	ppb	0.2075	0.26%
Ti 334.940†	1044913.2	2605.6	µg/L	32.13	2605.6	ppb	32.13	1.23%
Tl 190.801†	-12.8	4.1720	µg/L	2.80121	4.1720	ppb	2.80121	67.14%
U 409.014†	-29.6	-14.157	µg/L	5.5545	-14.157	ppb	5.5545	39.23%
V 292.402†	6192.2	81.440	µg/L	1.2302	81.440	ppb	1.2302	1.51%
Zn 213.857†	10723.7	308.16	µg/L	3.959	308.16	ppb	3.959	1.28%

Sequence No.: 21
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/27/2010 10:43:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	78513.9	78513.9	102	%			10:44:05
1	Al 396.153Radial†	7536.0	7401.3	5132.0	µg/L	5132.0	ppb	10:44:05
1	Ca 317.933Radial†	6914.5	6513.6	5129.0	µg/L	5129.0	ppb	10:44:05
1	Fe 238.204 Radial†	385.7	361.5	5201.7	µg/L	5201.7	ppb	10:44:26
1	K 766.490 Radial†	8205.9	7616.8	5056.3	µg/L	5056.3	ppb	10:44:05
1	Mg 279.077 IEC†	502.1	483.0	5267.1	µg/L	5267.1	ppb	10:44:26
1	Na 589.592 Radial†	36447.7	35116.3	10084	µg/L	10084	ppb	10:44:05
1	Sr 421.552†	81801.8	79479.0	505.00	µg/L	505.00	ppb	10:44:05
1	Sc 361.383	1954549.4	1954549.4	100.57	%			10:45:29
1	Y 371.029	1231977.8	1231977.8	100.26	%			10:45:29
1	Ag 328.068†	56498.5	56231.1	527.97	µg/L	527.97	ppb	10:45:35
1	As 188.979†	232.5	230.6	531.18	µg/L	531.18	ppb	10:45:55
1	B 249.677†	10800.5	10623.6	514.98	µg/L	514.98	ppb	10:45:35
1	Ba 233.527†	18218.8	18129.4	527.67	µg/L	527.67	ppb	10:45:35
1	Be 313.107†	749451.8	741334.9	516.30	µg/L	516.30	ppb	10:45:29
1	Cd 226.502†	17825.4	17859.1	525.66	µg/L	525.66	ppb	10:45:35
1	Co 228.616†	9551.4	9541.9	526.04	µg/L	526.04	ppb	10:45:35
1	Cr 267.716†	22927.7	22879.6	531.01	µg/L	531.01	ppb	10:45:35
1	Cu 324.752†	74120.3	70029.1	527.26	µg/L	527.26	ppb	10:45:35
1	Mn 257.610†	140845.7	140231.3	518.53	µg/L	518.53	ppb	10:45:35
1	Mo 202.031†	4210.8	4169.5	523.90	µg/L	523.90	ppb	10:45:55
1	Ni 231.604†	8763.2	8377.8	527.29	µg/L	527.29	ppb	10:45:35
1	P 214.914†	1325.3	1115.2	2619.7	µg/L	2619.7	ppb	10:45:55
1	Pb 220.353†	1896.8	1830.1	533.85	µg/L	533.85	ppb	10:45:55
1	S 181.975 Axial†	205.1	178.4	1022.7	µg/L	1022.7	ppb	10:45:55
1	Sb 206.836†	506.0	480.7	534.31	µg/L	534.31	ppb	10:45:55
1	Se 196.026†	343.9	329.5	539.54	µg/L	539.54	ppb	10:45:55
1	SiO2†	29407.3	26960.7	5690.7	µg/L	5690.7	ppb	10:45:35
1	Si 251.611†	32184.7	31696.5	2658.6	µg/L	2658.6	ppb	10:45:35
1	Sn 189.927†	953.8	925.0	542.53	µg/L	542.53	ppb	10:45:55
1	Ti 334.940†	209502.4	207533.0	517.25	µg/L	517.25	ppb	10:45:29
1	Tl 190.801†	290.2	311.6	541.24	µg/L	541.24	ppb	10:45:55
1	U 409.014†	5382.3	5584.5	531.89	µg/L	531.89	ppb	10:45:35
1	V 292.402†	42569.5	42448.6	533.93	µg/L	533.93	ppb	10:45:35
1	Zn 213.857†	18884.4	18105.3	524.10	µg/L	524.10	ppb	10:45:35
2	Sc RADIAL	78411.2	78411.2	102	%			10:44:31
2	Al 396.153Radial†	7565.3	7439.7	5158.8	µg/L	5158.8	ppb	10:44:31
2	Ca 317.933Radial†	6957.5	6564.7	5169.1	µg/L	5169.1	ppb	10:44:31
2	Fe 238.204 Radial†	390.8	367.0	5279.5	µg/L	5279.5	ppb	10:44:52
2	K 766.490 Radial†	8237.3	7658.1	5083.7	µg/L	5083.7	ppb	10:44:31
2	Mg 279.077 IEC†	502.6	484.1	5279.0	µg/L	5279.0	ppb	10:44:52
2	Na 589.592 Radial†	36535.2	35248.7	10122	µg/L	10122	ppb	10:44:31
2	Sr 421.552†	82142.4	79917.5	507.79	µg/L	507.79	ppb	10:44:31
2	Sc 361.383	1958001.1	1958001.1	100.75	%			10:46:02
2	Y 371.029	1233368.8	1233368.8	100.37	%			10:46:02
2	Ag 328.068†	56268.4	55903.7	524.91	µg/L	524.91	ppb	10:46:07
2	As 188.979†	234.4	232.1	534.69	µg/L	534.69	ppb	10:46:28
2	B 249.677†	10778.1	10582.5	512.93	µg/L	512.93	ppb	10:46:07
2	Ba 233.527†	18146.0	18025.1	524.63	µg/L	524.63	ppb	10:46:07
2	Be 313.107†	751383.0	741938.1	516.72	µg/L	516.72	ppb	10:46:02
2	Cd 226.502†	17820.5	17823.0	524.58	µg/L	524.58	ppb	10:46:07
2	Co 228.616†	9569.7	9543.3	526.11	µg/L	526.11	ppb	10:46:07
2	Cr 267.716†	22832.8	22745.2	527.89	µg/L	527.89	ppb	10:46:07
2	Cu 324.752†	73978.2	69758.1	525.23	µg/L	525.23	ppb	10:46:07
2	Mn 257.610†	140456.0	139597.6	516.20	µg/L	516.20	ppb	10:46:07
2	Mo 202.031†	4193.6	4145.1	520.84	µg/L	520.84	ppb	10:46:28
2	Ni 231.604†	8724.2	8323.7	523.88	µg/L	523.88	ppb	10:46:07
2	P 214.914†	1323.8	1111.4	2610.6	µg/L	2610.6	ppb	10:46:28
2	Pb 220.353†	1904.1	1834.0	534.98	µg/L	534.98	ppb	10:46:28

2	S 181.975 Axial†	210.5	183.4	1051.2 µg/L	1051.2 ppb	10:46:28
2	Sb 206.836†	507.8	481.6	535.27 µg/L	535.27 ppb	10:46:28
2	Se 196.026†	348.8	333.7	546.55 µg/L	546.55 ppb	10:46:28
2	SiO2†	29307.2	26809.8	5658.8 µg/L	5658.8 ppb	10:46:07
2	Si 251.611†	32151.4	31607.0	2651.1 µg/L	2651.1 ppb	10:46:07
2	Sn 189.927†	942.9	912.4	535.21 µg/L	535.21 ppb	10:46:28
2	Ti 334.940†	209831.5	207492.4	517.15 µg/L	517.15 ppb	10:46:02
2	Tl 190.801†	285.3	306.2	532.00 µg/L	532.00 ppb	10:46:28
2	U 409.014†	5250.4	5444.2	518.49 µg/L	518.49 ppb	10:46:07
2	V 292.402†	42463.4	42268.7	531.65 µg/L	531.65 ppb	10:46:07
2	Zn 213.857†	18798.0	17986.5	520.66 µg/L	520.66 ppb	10:46:07
3	Sc RADIAL	78677.8	78677.8	102 %		10:44:57
3	Al 396.153Radial†	7601.5	7450.0	5167.1 µg/L	5167.1 ppb	10:44:57
3	Ca 317.933Radial†	7000.3	6583.3	5183.8 µg/L	5183.8 ppb	10:44:57
3	Fe 238.204 Radial†	389.2	364.1	5238.1 µg/L	5238.1 ppb	10:45:18
3	K 766.490 Radial†	8250.9	7644.1	5074.4 µg/L	5074.4 ppb	10:44:57
3	Mg 279.077 IEC†	496.0	476.0	5189.4 µg/L	5189.4 ppb	10:45:18
3	Na 589.592 Radial†	36665.7	35254.9	10124 µg/L	10124 ppb	10:44:57
3	Sr 421.552†	82476.5	79970.9	508.13 µg/L	508.13 ppb	10:44:57
3	Sc 361.383	1957852.7	1957852.7	100.74 %		10:46:35
3	Y 371.029	1234064.2	1234064.2	100.43 %		10:46:35
3	Ag 328.068†	55199.0	54846.5	514.89 µg/L	514.89 ppb	10:46:40
3	As 188.979†	212.5	210.4	484.69 µg/L	484.69 ppb	10:47:01
3	B 249.677†	10512.0	10319.2	500.09 µg/L	500.09 ppb	10:46:40
3	Ba 233.527†	17466.9	17352.4	505.05 µg/L	505.05 ppb	10:46:40
3	Be 313.107†	733721.1	724463.0	504.55 µg/L	504.55 ppb	10:46:35
3	Cd 226.502†	17120.9	17129.9	504.16 µg/L	504.16 ppb	10:46:40
3	Co 228.616†	9119.4	9097.0	501.46 µg/L	501.46 ppb	10:46:40
3	Cr 267.716†	21478.3	21402.5	496.73 µg/L	496.73 ppb	10:46:40
3	Cu 324.752†	70907.4	66715.5	502.35 µg/L	502.35 ppb	10:46:40
3	Mn 257.610†	134079.5	133278.8	492.85 µg/L	492.85 ppb	10:46:40
3	Mo 202.031†	3726.5	3681.8	462.64 µg/L	462.64 ppb	10:47:01
3	Ni 231.604†	8385.7	7988.4	502.78 µg/L	502.78 ppb	10:46:40
3	P 214.914†	1214.3	1002.8	2352.2 µg/L	2352.2 ppb	10:47:01
3	Pb 220.353†	1729.9	1661.2	484.52 µg/L	484.52 ppb	10:47:01
3	S 181.975 Axial†	196.3	169.3	970.71 µg/L	970.71 ppb	10:47:01
3	Sb 206.836†	468.1	442.2	491.10 µg/L	491.10 ppb	10:47:01
3	Se 196.026†	318.6	303.8	499.19 µg/L	499.19 ppb	10:47:01
3	SiO2†	28433.0	25944.3	5476.1 µg/L	5476.1 ppb	10:46:40
3	Si 251.611†	31087.2	30553.1	2562.7 µg/L	2562.7 ppb	10:46:40
3	Sn 189.927†	837.0	807.4	473.89 µg/L	473.89 ppb	10:47:01
3	Ti 334.940†	204322.8	202040.2	503.56 µg/L	503.56 ppb	10:46:35
3	Tl 190.801†	267.8	288.9	501.96 µg/L	501.96 ppb	10:47:01
3	U 409.014†	4911.2	5107.9	486.40 µg/L	486.40 ppb	10:46:40
3	V 292.402†	40442.4	40265.8	506.19 µg/L	506.19 ppb	10:46:40
3	Zn 213.857†	18056.4	17251.7	499.37 µg/L	499.37 ppb	10:46:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1956801.1	100.69	%	0.100				0.10%
Sc RADIAL	78534.3	102	%	0.2				0.17%
Y 371.029	1233137.0	100.35	%	0.086				0.09%
Ag 328.068†	55660.4	522.59	µg/L	6.844	522.59	ppb	6.844	1.31%
QC value within limits for Ag 328.068 Recovery = 104.52%								
Al 396.153Radial†	7430.3	5152.7	µg/L	18.33	5152.7	ppb	18.33	0.36%
QC value within limits for Al 396.153Radial Recovery = 103.05%								
As 188.979†	224.4	516.85	µg/L	27.908	516.85	ppb	27.908	5.40%
QC value within limits for As 188.979 Recovery = 103.37%								
B 249.677†	10508.4	509.33	µg/L	8.068	509.33	ppb	8.068	1.58%
QC value within limits for B 249.677 Recovery = 101.87%								
Ba 233.527†	17835.6	519.12	µg/L	12.279	519.12	ppb	12.279	2.37%
QC value within limits for Ba 233.527 Recovery = 103.82%								
Be 313.107†	735912.0	512.52	µg/L	6.908	512.52	ppb	6.908	1.35%
QC value within limits for Be 313.107 Recovery = 102.50%								
Ca 317.933Radial†	6553.9	5160.6	µg/L	28.39	5160.6	ppb	28.39	0.55%
QC value within limits for Ca 317.933Radial Recovery = 103.21%								
Cd 226.502†	17604.0	518.14	µg/L	12.112	518.14	ppb	12.112	2.34%
QC value within limits for Cd 226.502 Recovery = 103.63%								
Co 228.616†	9394.1	517.87	µg/L	14.213	517.87	ppb	14.213	2.74%

QC value within limits for Co 228.616 Recovery = 103.57%

Cr 267.716†	22342.4	518.55 µg/L	18.955	518.55 ppb	18.955	3.66%

QC value within limits for Cr 267.716 Recovery = 103.71%

Cu 324.752†	68834.3	518.28 µg/L	13.833	518.28 ppb	13.833	2.67%

QC value within limits for Cu 324.752 Recovery = 103.66%

Fe 238.204 Radial†	364.2	5239.8 µg/L	38.95	5239.8 ppb	38.95	0.74%

QC value within limits for Fe 238.204 Radial Recovery = 104.80%

K 766.490 Radial†	7639.7	5071.5 µg/L	13.94	5071.5 ppb	13.94	0.27%

QC value within limits for K 766.490 Radial Recovery = 101.43%

Mg 279.077 IEC†	481.0	5245.2 µg/L	48.62	5245.2 ppb	48.62	0.93%

QC value within limits for Mg 279.077 IEC Recovery = 104.90%

Mn 257.610†	137702.6	509.19 µg/L	14.199	509.19 ppb	14.199	2.79%

QC value within limits for Mn 257.610 Recovery = 101.84%

Mo 202.031†	3998.8	502.46 µg/L	34.518	502.46 ppb	34.518	6.87%

QC value within limits for Mo 202.031 Recovery = 100.49%

Na 589.592 Radial†	35206.6	10110 µg/L	22.5	10110 ppb	22.5	0.22%

QC value within limits for Na 589.592 Radial Recovery = 101.10%

Ni 231.604†	8230.0	517.99 µg/L	13.275	517.99 ppb	13.275	2.56%

QC value within limits for Ni 231.604 Recovery = 103.60%

P 214.914†	1076.5	2527.5 µg/L	151.90	2527.5 ppb	151.90	6.01%

QC value within limits for P 214.914 Recovery = 101.10%

Pb 220.353†	1775.1	517.78 µg/L	28.812	517.78 ppb	28.812	5.56%

QC value within limits for Pb 220.353 Recovery = 103.56%

S 181.975 Axial†	177.0	1014.9 µg/L	40.83	1014.9 ppb	40.83	4.02%

QC value within limits for S 181.975 Axial Recovery = 101.49%

Sb 206.836†	468.2	520.23 µg/L	25.228	520.23 ppb	25.228	4.85%

QC value within limits for Sb 206.836 Recovery = 104.05%

Se 196.026†	322.3	528.42 µg/L	25.561	528.42 ppb	25.561	4.84%

QC value within limits for Se 196.026 Recovery = 105.68%

SiO2†	26571.6	5608.5 µg/L	115.77	5608.5 ppb	115.77	2.06%

QC value within limits for SiO2 Recovery = 104.88%

Si 251.611†	31285.6	2624.1 µg/L	53.34	2624.1 ppb	53.34	2.03%

QC value within limits for Si 251.611 Recovery = 104.97%

Sn 189.927†	881.6	517.21 µg/L	37.692	517.21 ppb	37.692	7.29%

QC value within limits for Sn 189.927 Recovery = 103.44%

Sr 421.552†	79789.1	506.97 µg/L	1.715	506.97 ppb	1.715	0.34%

QC value within limits for Sr 421.552 Recovery = 101.39%

Ti 334.940†	205688.5	512.65 µg/L	7.876	512.65 ppb	7.876	1.54%

QC value within limits for Ti 334.940 Recovery = 102.53%

Tl 190.801†	302.2	525.07 µg/L	20.534	525.07 ppb	20.534	3.91%

QC value within limits for Tl 190.801 Recovery = 105.01%

U 409.014†	5378.9	512.26 µg/L	23.375	512.26 ppb	23.375	4.56%

QC value within limits for U 409.014 Recovery = 102.45%

V 292.402†	41661.1	523.93 µg/L	15.400	523.93 ppb	15.400	2.94%

QC value within limits for V 292.402 Recovery = 104.79%

Zn 213.857†	17781.2	514.71 µg/L	13.395	514.71 ppb	13.395	2.60%

QC value within limits for Zn 213.857 Recovery = 102.94%

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/27/2010 10:47:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	76008.7	76008.7	98.9	%			10:47:43
1	Al 396.153Radial†	-21.8	5.9	4.0787	µg/L	4.0787	ppb	10:47:43
1	Ca 317.933Radial†	251.6	2.6	2.0467	µg/L	2.0467	ppb	10:48:03
1	Fe 238.204 Radial†	18.6	2.9	42.032	µg/L	42.032	ppb	10:48:03
1	K 766.490 Radial†	390.7	-17.1	-11.359	µg/L	-11.359	ppb	10:47:43
1	Mg 279.077 IEC†	8.0	-0.2	-2.1102	µg/L	-2.1102	ppb	10:48:03
1	Na 589.592 Radial†	396.9	-143.8	-41.302	µg/L	-41.302	ppb	10:47:43
1	Sr 421.552†	561.3	9.6	0.0610	µg/L	0.0610	ppb	10:47:43
1	Sc 361.383	1955243.1	1955243.1	100.61	%			10:49:05
1	Y 371.029	1236657.7	1236657.7	100.64	%			10:49:05
1	Ag 328.068†	-40.2	15.1	0.1460	µg/L	0.1460	ppb	10:49:11
1	As 188.979†	-2.3	-2.9	-6.6202	µg/L	-6.6202	ppb	10:49:31
1	B 249.677†	124.4	8.5	0.3896	µg/L	0.3896	ppb	10:49:31
1	Ba 233.527†	-15.5	-0.9	-0.0246	µg/L	-0.0246	ppb	10:49:31
1	Be 313.107†	3959.5	96.0	0.0668	µg/L	0.0668	ppb	10:49:11
1	Cd 226.502†	-132.8	3.4	0.0962	µg/L	0.0962	ppb	10:49:31
1	Co 228.616†	-43.7	1.6	0.0876	µg/L	0.0876	ppb	10:49:31
1	Cr 267.716†	-107.7	-24.3	-0.5626	µg/L	-0.5626	ppb	10:49:11
1	Cu 324.752†	3653.7	-36.6	-0.2694	µg/L	-0.2694	ppb	10:49:11
1	Mn 257.610†	-164.5	26.0	0.1018	µg/L	0.1018	ppb	10:49:31
1	Mo 202.031†	19.3	2.0	0.2532	µg/L	0.2532	ppb	10:49:31
1	Ni 231.604†	342.5	5.0	0.3152	µg/L	0.3152	ppb	10:49:31
1	P 214.914†	212.8	9.1	21.731	µg/L	21.731	ppb	10:49:31
1	Pb 220.353†	51.1	-5.2	-1.5144	µg/L	-1.5144	ppb	10:49:31
1	S 181.975 Axial†	22.1	-3.6	-20.420	µg/L	-20.420	ppb	10:49:31
1	Sb 206.836†	26.0	3.4	3.7744	µg/L	3.7744	ppb	10:49:31
1	Se 196.026†	14.3	1.8	2.9467	µg/L	2.9467	ppb	10:49:31
1	SiO2†	2259.4	-33.1	-6.9784	µg/L	-6.9784	ppb	10:49:11
1	Si 251.611†	323.5	17.0	1.4283	µg/L	1.4283	ppb	10:49:31
1	Sn 189.927†	26.6	3.0	1.7574	µg/L	1.7574	ppb	10:49:31
1	Ti 334.940†	867.9	89.0	0.2222	µg/L	0.2222	ppb	10:49:11
1	Tl 190.801†	-24.7	-1.5	-2.4954	µg/L	-2.4954	ppb	10:49:31
1	U 409.014†	-136.5	97.3	9.2813	µg/L	9.2813	ppb	10:49:11
1	V 292.402†	-91.1	31.6	0.4058	µg/L	0.4058	ppb	10:49:11
1	Zn 213.857†	671.7	-3.7	-0.1110	µg/L	-0.1110	ppb	10:49:31
2	Sc RADIAL	76146.3	76146.3	99.1	%			10:48:09
2	Al 396.153Radial†	-21.7	6.1	4.1372	µg/L	4.1372	ppb	10:48:09
2	Ca 317.933Radial†	251.6	2.1	1.6909	µg/L	1.6909	ppb	10:48:29
2	Fe 238.204 Radial†	17.5	1.8	25.688	µg/L	25.688	ppb	10:48:29
2	K 766.490 Radial†	449.6	41.6	27.633	µg/L	27.633	ppb	10:48:09
2	Mg 279.077 IEC†	5.5	-2.8	-29.940	µg/L	-29.940	ppb	10:48:29
2	Na 589.592 Radial†	363.7	-178.0	-51.104	µg/L	-51.104	ppb	10:48:09
2	Sr 421.552†	597.8	45.4	0.2883	µg/L	0.2883	ppb	10:48:09
2	Sc 361.383	1943449.8	1943449.8	100.00	%			10:49:37
2	Y 371.029	1227540.6	1227540.6	99.898	%			10:49:37
2	Ag 328.068†	-42.7	12.4	0.1171	µg/L	0.1171	ppb	10:49:43
2	As 188.979†	1.0	0.5	1.1289	µg/L	1.1289	ppb	10:50:03
2	B 249.677†	132.2	17.0	0.8157	µg/L	0.8157	ppb	10:50:03
2	Ba 233.527†	-9.2	5.3	0.1539	µg/L	0.1539	ppb	10:50:03
2	Be 313.107†	3842.9	3.4	0.0023	µg/L	0.0023	ppb	10:49:43
2	Cd 226.502†	-127.2	8.3	0.2427	µg/L	0.2427	ppb	10:50:03
2	Co 228.616†	-44.8	0.2	0.0143	µg/L	0.0143	ppb	10:50:03
2	Cr 267.716†	-71.6	11.2	0.2588	µg/L	0.2588	ppb	10:49:43
2	Cu 324.752†	3603.3	-65.0	-0.4854	µg/L	-0.4854	ppb	10:49:43
2	Mn 257.610†	-168.1	21.4	0.0835	µg/L	0.0835	ppb	10:50:03
2	Mo 202.031†	53.1	35.9	4.5109	µg/L	4.5109	ppb	10:50:03
2	Ni 231.604†	349.1	13.7	0.8635	µg/L	0.8635	ppb	10:50:03
2	P 214.914†	209.8	7.4	17.679	µg/L	17.679	ppb	10:50:03
2	Pb 220.353†	57.5	1.6	0.4878	µg/L	0.4878	ppb	10:50:03

2	S 181.975 Axial†	22.0	-3.5	-20.136 µg/L	-20.136 ppb	10:50:03
2	Sb 206.836†	29.4	7.0	7.7725 µg/L	7.7725 ppb	10:50:03
2	Se 196.026†	9.0	-3.4	-5.3378 µg/L	-5.3378 ppb	10:50:03
2	SiO2†	2262.4	-16.4	-3.4659 µg/L	-3.4659 ppb	10:49:43
2	Si 251.611†	338.0	33.4	2.8052 µg/L	2.8052 ppb	10:50:03
2	Sn 189.927†	27.5	4.1	2.4020 µg/L	2.4020 ppb	10:50:03
2	Ti 334.940†	800.7	27.0	0.0698 µg/L	0.0698 ppb	10:49:43
2	Tl 190.801†	-22.4	0.7	1.1611 µg/L	1.1611 ppb	10:50:03
2	U 409.014†	-286.6	-53.6	-5.1200 µg/L	-5.1200 ppb	10:49:43
2	V 292.402†	-120.6	1.6	0.0510 µg/L	0.0510 ppb	10:49:43
2	Zn 213.857†	682.3	11.0	0.3178 µg/L	0.3178 ppb	10:50:03
3	Sc RADIAL	75638.4	75638.4	98.5 %		10:48:35
3	Al 396.153Radial†	4.0	32.0	22.223 µg/L	22.223 ppb	10:48:35
3	Ca 317.933Radial†	258.9	11.3	8.8892 µg/L	8.8892 ppb	10:48:55
3	Fe 238.204 Radial†	17.7	2.1	29.839 µg/L	29.839 ppb	10:48:55
3	K 766.490 Radial†	409.6	4.0	2.6742 µg/L	2.6742 ppb	10:48:35
3	Mg 279.077 IEC†	9.5	1.4	14.850 µg/L	14.850 ppb	10:48:55
3	Na 589.592 Radial†	375.1	-164.0	-47.098 µg/L	-47.098 ppb	10:48:35
3	Sr 421.552†	572.2	23.4	0.1487 µg/L	0.1487 ppb	10:48:35
3	Sc 361.383	1950011.6	1950011.6	100.34 %		10:50:09
3	Y 371.029	1233227.8	1233227.8	100.36 %		10:50:09
3	Ag 328.068†	-49.2	6.0	0.0572 µg/L	0.0572 ppb	10:50:15
3	As 188.979†	-3.5	-4.0	-9.2421 µg/L	-9.2421 ppb	10:50:35
3	B 249.677†	106.0	-9.5	-0.4785 µg/L	-0.4785 ppb	10:50:35
3	Ba 233.527†	-15.6	-1.0	-0.0307 µg/L	-0.0307 ppb	10:50:35
3	Be 313.107†	3891.1	38.5	0.0268 µg/L	0.0268 ppb	10:50:15
3	Cd 226.502†	-131.3	4.6	0.1318 µg/L	0.1318 ppb	10:50:35
3	Co 228.616†	-38.2	7.0	0.3848 µg/L	0.3848 ppb	10:50:35
3	Cr 267.716†	-79.4	3.7	0.0849 µg/L	0.0849 ppb	10:50:15
3	Cu 324.752†	3608.9	-71.5	-0.5335 µg/L	-0.5335 ppb	10:50:15
3	Mn 257.610†	-160.9	29.1	0.1110 µg/L	0.1110 ppb	10:50:35
3	Mo 202.031†	23.9	6.6	0.8360 µg/L	0.8360 ppb	10:50:35
3	Ni 231.604†	344.2	7.6	0.4768 µg/L	0.4768 ppb	10:50:35
3	P 214.914†	205.6	2.5	5.9294 µg/L	5.9294 ppb	10:50:35
3	Pb 220.353†	58.2	2.0	0.5951 µg/L	0.5951 ppb	10:50:35
3	S 181.975 Axial†	24.7	-0.9	-5.2178 µg/L	-5.2178 ppb	10:50:35
3	Sb 206.836†	23.6	1.1	1.2096 µg/L	1.2096 ppb	10:50:35
3	Se 196.026†	10.5	-1.9	-2.9260 µg/L	-2.9260 ppb	10:50:35
3	SiO2†	2248.7	-37.7	-7.9509 µg/L	-7.9509 ppb	10:50:15
3	Si 251.611†	352.3	46.6	3.9115 µg/L	3.9115 ppb	10:50:35
3	Sn 189.927†	22.7	-0.8	-0.4409 µg/L	-0.4409 ppb	10:50:35
3	Ti 334.940†	798.8	22.4	0.0549 µg/L	0.0549 ppb	10:50:15
3	Tl 190.801†	-21.3	1.8	3.1524 µg/L	3.1524 ppb	10:50:35
3	U 409.014†	-239.9	-6.1	-0.5894 µg/L	-0.5894 ppb	10:50:15
3	V 292.402†	-135.1	-12.5	-0.1480 µg/L	-0.1480 ppb	10:50:15
3	Zn 213.857†	673.4	-0.2	-0.0080 µg/L	-0.0080 ppb	10:50:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1949568.2	100.32	%	0.304				0.30%
Sc RADIAL	75931.1	98.8	%	0.34				0.35%
Y 371.029	1232475.4	100.30	%	0.375				0.37%
Ag 328.068†	11.2	0.1068	µg/L	0.04532	0.1068	ppb	0.04532	42.45%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.7	10.146	µg/L	10.4589	10.146	ppb	10.4589	103.08%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.1	-4.9111	µg/L	5.39262	-4.9111	ppb	5.39262	109.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	5.3	0.2423	µg/L	0.65954	0.2423	ppb	0.65954	272.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.1	0.0329	µg/L	0.10483	0.0329	ppb	0.10483	319.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	46.0	0.0320	µg/L	0.03257	0.0320	ppb	0.03257	101.85%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	5.3	4.2089	µg/L	4.05714	4.2089	ppb	4.05714	96.39%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.4	0.1569	µg/L	0.07640	0.1569	ppb	0.07640	48.69%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	2.9	0.1622	µg/L	0.19624	0.1622	ppb	0.19624	120.96%

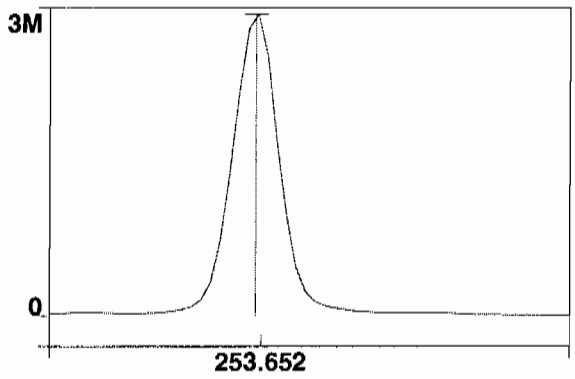
```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -3.1     -0.0730 µg/L      0.43289     -0.0730 ppb       0.43289 593.11%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -57.7     -0.4294 µg/L      0.14068     -0.4294 ppb       0.14068  32.76%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        2.3      32.519 µg/L       8.4954      32.519 ppb        8.4954  26.12%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         9.5      6.3160 µg/L     19.74940      6.3160 ppb      19.74940 312.69%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.5     -5.7335 µg/L     22.61400     -5.7335 ppb      22.61400 394.42%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              25.5      0.0988 µg/L      0.01400      0.0988 ppb       0.01400  14.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              14.9      1.8667 µg/L      2.30843      1.8667 ppb       2.30843 123.66%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -161.9     -46.501 µg/L       4.9282     -46.501 ppb        4.9282  10.60%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               8.8      0.5518 µg/L      0.28176      0.5518 ppb       0.28176  51.06%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                6.3      15.113 µg/L       8.2074      15.113 ppb        8.2074  54.31%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -0.5     -0.1438 µg/L      1.18818     -0.1438 ppb       1.18818 826.02%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -2.7     -15.258 µg/L       8.6963     -15.258 ppb        8.6963  56.99%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               3.8      4.2522 µg/L      3.30745      4.2522 ppb       3.30745  77.78%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.2     -1.7724 µg/L      4.26103     -1.7724 ppb       4.26103 240.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -29.1     -6.1317 µg/L      2.35929     -6.1317 ppb       2.35929  38.48%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              32.4      2.7150 µg/L      1.24407      2.7150 ppb       1.24407  45.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.1      1.2395 µg/L      1.49054      1.2395 ppb       1.49054 120.26%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              26.1      0.1660 µg/L      0.11463      0.1660 ppb       0.11463  69.06%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              46.2      0.1156 µg/L      0.09257      0.1156 ppb       0.09257  80.06%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.4      0.6060 µg/L      2.86452      0.6060 ppb       2.86452 472.68%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               12.5      1.1906 µg/L      7.36379      1.1906 ppb       7.36379 618.48%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                6.9      0.1029 µg/L      0.28052      0.1029 ppb       0.28052 272.56%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               2.4      0.0663 µg/L      0.22382      0.0663 ppb       0.22382 337.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Method: Hg_ReAlign
Result: 020210

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



Intensity: 3336059.5 cps
Conc:

1

1/29/2010 10:14:55 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 2

Analysis Begun

Start Time: 1/29/2010 10:15:51 **Plasma On Time: 00:00:00**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\012910.sif
Batch ID:
Results Data Set: 012910
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 1/28/2010 11:48:57**
IEC File: 011110.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 1/29/2010 10:15:53**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Rep1#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	5377.8	5377.8	99.4	%	10:17:46
1	Y RADIAL	5825.8	5825.8	99.71	%	10:17:46
1	Al 396.153Radial†	2.9	2.9	[0.00]	ug/L	10:18:06
1	Ca 317.933Radial†	20.1	20.2	[0.00]	ug/L	10:18:06
1	Fe 238.204 Radial†	8.6	8.7	[0.00]	ug/L	10:18:06
1	K 766.490 Radial†	2410.9	2424.4	[0.00]	ug/L	10:17:46
1	Mg 279.077 IEC†	1.8	1.8	[0.00]	ug/L	10:18:06
1	Na 589.592 Radial†	-930.8	-936.0	[0.00]	ug/L	10:17:46
1	Sr 421.552†	19.5	19.7	[0.00]	ug/L	10:17:46
1	Sc 361.383	961841.9	961841.9	99.936	%	10:19:02
1	Y 371.029	853274.2	853274.2	99.969	%	10:19:02
1	Ag 328.068†	275.0	275.1	[0.00]	ug/L	10:19:07
1	As 188.979†	-32.1	-32.1	[0.00]	ug/L	10:19:27
1	B 249.677†	-230.1	-230.2	[0.00]	ug/L	10:19:27
1	Ba 233.527†	2.2	2.2	[0.00]	ug/L	10:19:27
1	Be 313.107†	-4942.4	-4945.6	[0.00]	ug/L	10:19:07
1	Cd 226.502†	-189.9	-190.0	[0.00]	ug/L	10:19:27
1	Co 228.616†	-77.6	-77.7	[0.00]	ug/L	10:19:27
1	Cr 267.716†	98.3	98.3	[0.00]	ug/L	10:19:27
1	Cu 324.752†	8832.7	8838.4	[0.00]	ug/L	10:19:07
1	Mn 257.610†	673.0	673.4	[0.00]	ug/L	10:19:27
1	Mo 202.031†	18.5	18.5	[0.00]	ug/L	10:19:27
1	Ni 231.604†	102.6	102.7	[0.00]	ug/L	10:19:27
1	P 214.914†	237.0	237.1	[0.00]	ug/L	10:19:27
1	Pb 220.353†	-40.3	-40.3	[0.00]	ug/L	10:19:27
1	S 181.975 Axial†	49.0	49.0	[0.00]	ug/L	10:19:27
1	Sb 206.836†	42.9	43.0	[0.00]	ug/L	10:19:27
1	Se 196.026†	-11.2	-11.2	[0.00]	ug/L	10:19:27
1	Si 251.611†	514.5	514.8	[0.00]	ug/L	10:19:27
1	Sn 189.927†	5.9	5.9	[0.00]	ug/L	10:19:27
1	Ti 334.940†	-983.5	-984.2	[0.00]	ug/L	10:19:07
1	Tl 190.801†	-49.6	-49.6	[0.00]	ug/L	10:19:27
1	U 409.014†	-1603.7	-1604.7	[0.00]	ug/L	10:19:07
1	V 292.402†	-1333.5	-1334.3	[0.00]	ug/L	10:19:07
1	Zn 213.857†	1030.7	1031.4	[0.00]	ug/L	10:19:27
1	SiO2†	502.8	503.2	[0.00]	ug/L	10:20:48
2	Sc Radial	5457.9	5457.9	101	%	10:18:11
2	Y RADIAL	5925.9	5925.9	101.4	%	10:18:11
2	Al 396.153Radial†	-0.6	-0.6	[0.00]	ug/L	10:18:31
2	Ca 317.933Radial†	15.5	15.4	[0.00]	ug/L	10:18:31
2	Fe 238.204 Radial†	10.6	10.5	[0.00]	ug/L	10:18:31
2	K 766.490 Radial†	2302.8	2281.7	[0.00]	ug/L	10:18:11
2	Mg 279.077 IEC†	2.5	2.4	[0.00]	ug/L	10:18:31
2	Na 589.592 Radial†	-870.5	-862.5	[0.00]	ug/L	10:18:11
2	Sr 421.552†	17.4	17.3	[0.00]	ug/L	10:18:11
2	Sc 361.383	960464.8	960464.8	99.793	%	10:19:32
2	Y 371.029	851206.3	851206.3	99.726	%	10:19:32
2	Ag 328.068†	337.4	338.1	[0.00]	ug/L	10:19:38
2	As 188.979†	-42.4	-42.5	[0.00]	ug/L	10:19:58
2	B 249.677†	-213.0	-213.5	[0.00]	ug/L	10:19:58
2	Ba 233.527†	0.4	0.4	[0.00]	ug/L	10:19:58
2	Be 313.107†	-5084.9	-5095.5	[0.00]	ug/L	10:19:38
2	Cd 226.502†	-217.1	-217.6	[0.00]	ug/L	10:19:58
2	Co 228.616†	-75.3	-75.4	[0.00]	ug/L	10:19:58
2	Cr 267.716†	97.0	97.2	[0.00]	ug/L	10:19:58
2	Cu 324.752†	8943.6	8962.2	[0.00]	ug/L	10:19:38
2	Mn 257.610†	677.5	678.9	[0.00]	ug/L	10:19:58
2	Mo 202.031†	18.6	18.6	[0.00]	ug/L	10:19:58
2	Ni 231.604†	82.4	82.5	[0.00]	ug/L	10:19:58
2	P 214.914†	249.8	250.3	[0.00]	ug/L	10:19:58
2	Pb 220.353†	-39.1	-39.2	[0.00]	ug/L	10:19:58
2	S 181.975 Axial†	52.9	53.0	[0.00]	ug/L	10:19:58
2	Sb 206.836†	32.9	33.0	[0.00]	ug/L	10:19:58
2	Se 196.026†	-12.9	-13.0	[0.00]	ug/L	10:19:58
2	Si 251.611†	514.6	515.7	[0.00]	ug/L	10:19:58
2	Sn 189.927†	4.7	4.7	[0.00]	ug/L	10:19:58
2	Ti 334.940†	-913.1	-915.0	[0.00]	ug/L	10:19:38
2	Tl 190.801†	-52.7	-52.8	[0.00]	ug/L	10:19:58
2	U 409.014†	-1417.9	-1420.8	[0.00]	ug/L	10:19:38
2	V 292.402†	-1374.4	-1377.3	[0.00]	ug/L	10:19:38

2	Zn 213.857†	1030.8	1032.9	[0.00]	ug/L	10:19:58
2	SiO2†	518.8	519.9	[0.00]	ug/L	10:21:08
3	Sc Radial	5388.0	5388.0	99.6	%	10:18:36
3	Y RADIAL	5776.7	5776.7	98.87	%	10:18:36
3	Al 396.153Radial†	6.8	6.8	[0.00]	ug/L	10:18:56
3	Ca 317.933Radial†	17.0	17.1	[0.00]	ug/L	10:18:56
3	Fe 238.204 Radial†	9.6	9.7	[0.00]	ug/L	10:18:56
3	K 766.490 Radial†	2406.3	2415.2	[0.00]	ug/L	10:18:36
3	Mg 279.077 IEC†	-0.3	-0.3	[0.00]	ug/L	10:18:56
3	Na 589.592 Radial†	-869.2	-872.4	[0.00]	ug/L	10:18:36
3	Sr 421.552†	15.2	15.2	[0.00]	ug/L	10:18:36
3	Sc 361.383	965071.5	965071.5	100.27	%	10:20:03
3	Y 371.029	856144.4	856144.4	100.30	%	10:20:03
3	Ag 328.068†	291.6	290.8	[0.00]	ug/L	10:20:08
3	As 188.979†	-27.7	-27.6	[0.00]	ug/L	10:20:28
3	B 249.677†	-234.0	-233.3	[0.00]	ug/L	10:20:28
3	Ba 233.527†	-2.2	-2.2	[0.00]	ug/L	10:20:28
3	Be 313.107†	-4996.3	-4982.8	[0.00]	ug/L	10:20:08
3	Cd 226.502†	-197.1	-196.6	[0.00]	ug/L	10:20:28
3	Co 228.616†	-76.0	-75.8	[0.00]	ug/L	10:20:28
3	Cr 267.716†	93.6	93.4	[0.00]	ug/L	10:20:28
3	Cu 324.752†	8950.5	8926.3	[0.00]	ug/L	10:20:08
3	Mn 257.610†	670.9	669.1	[0.00]	ug/L	10:20:28
3	Mo 202.031†	29.2	29.1	[0.00]	ug/L	10:20:28
3	Ni 231.604†	94.2	94.0	[0.00]	ug/L	10:20:28
3	P 214.914†	258.4	257.7	[0.00]	ug/L	10:20:28
3	Pb 220.353†	-59.9	-59.7	[0.00]	ug/L	10:20:28
3	S 181.975 Axial†	57.9	57.8	[0.00]	ug/L	10:20:28
3	Sb 206.836†	34.9	34.8	[0.00]	ug/L	10:20:28
3	Se 196.026†	-12.0	-12.0	[0.00]	ug/L	10:20:28
3	Si 251.611†	522.5	521.1	[0.00]	ug/L	10:20:28
3	Sn 189.927†	10.2	10.2	[0.00]	ug/L	10:20:28
3	Ti 334.940†	-826.1	-823.8	[0.00]	ug/L	10:20:08
3	Tl 190.801†	-44.3	-44.2	[0.00]	ug/L	10:20:28
3	U 409.014†	-1608.0	-1603.6	[0.00]	ug/L	10:20:08
3	V 292.402†	-1443.9	-1440.0	[0.00]	ug/L	10:20:08
3	Zn 213.857†	1021.0	1018.2	[0.00]	ug/L	10:20:28
3	SiO2†	546.0	544.5	[0.00]	ug/L	10:21:28

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	962459.4	2364.58	0.25%	100.00	%
Sc Radial	5407.9	43.60	0.81%	100	%
Y 371.029	853541.6	2479.89	0.29%	100.00	%
Y RADIAL	5842.8	76.06	1.30%	100.0	%
Ag 328.068†	301.4	32.78	10.88%	[0.00]	ug/L
Al 396.153Radial†	3.0	3.71	122.07%	[0.00]	ug/L
As 188.979†	-34.1	7.63	22.40%	[0.00]	ug/L
B 249.677†	-225.7	10.70	4.74%	[0.00]	ug/L
Ba 233.527†	0.2	2.22	>999.9%	[0.00]	ug/L
Be 313.107†	-5008.0	78.04	1.56%	[0.00]	ug/L
Ca 317.933Radial†	17.5	2.43	13.82%	[0.00]	ug/L
Cd 226.502†	-201.4	14.40	7.15%	[0.00]	ug/L
Co 228.616†	-76.3	1.21	1.58%	[0.00]	ug/L
Cr 267.716†	96.3	2.61	2.71%	[0.00]	ug/L
Cu 324.752†	8908.9	63.68	0.71%	[0.00]	ug/L
Fe 238.204 Radial†	9.6	0.90	9.40%	[0.00]	ug/L
K 766.490 Radial†	2373.8	79.87	3.36%	[0.00]	ug/L
Mg 279.077 IEC†	1.3	1.46	111.19%	[0.00]	ug/L
Mn 257.610†	673.8	4.95	0.73%	[0.00]	ug/L
Mo 202.031†	22.1	6.12	27.74%	[0.00]	ug/L
Na 589.592 Radial†	-890.3	39.89	4.48%	[0.00]	ug/L
Ni 231.604†	93.0	10.10	10.85%	[0.00]	ug/L
P 214.914†	248.4	10.40	4.19%	[0.00]	ug/L
Pb 220.353†	-46.4	11.56	24.89%	[0.00]	ug/L
S 181.975 Axial†	53.3	4.38	8.22%	[0.00]	ug/L
Sb 206.836†	36.9	5.32	14.41%	[0.00]	ug/L
Se 196.026†	-12.0	0.90	7.50%	[0.00]	ug/L
Si 251.611†	517.2	3.42	0.66%	[0.00]	ug/L

Sn 189.927†	7.0	2.87	41.27%	[0.00] ug/L
Sr 421.552†	17.4	2.22	12.79%	[0.00] ug/L
Ti 334.940†	-907.7	80.40	8.86%	[0.00] ug/L
Tl 190.801†	-48.9	4.33	8.87%	[0.00] ug/L
U 409.014†	-1543.1	105.86	6.86%	[0.00] ug/L
V 292.402†	-1383.9	53.15	3.84%	[0.00] ug/L
Zn 213.857†	1027.5	8.10	0.79%	[0.00] ug/L
SiO2†	522.5	20.81	3.98%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/29/2010 10:23:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5400.6	5400.6	99.9	%	10:25:36
1	Y RADIAL	5833.0	5833.0	99.83	%	10:25:36
1	K 766.490 Radial†	8224.3	5861.6	[1000]	ug/L	10:25:31
1	Sr 421.552†	15627.0	15630.6	[100]	ug/L	10:25:36
1	Sc 361.383	963822.1	963822.1	100.14	%	10:26:03
1	Y 371.029	852238.3	852238.3	99.847	%	10:26:03
1	Ag 328.068†	24309.8	23974.0	[100]	ug/L	10:26:08
1	As 188.979†	211.4	245.1	[100]	ug/L	10:26:28
1	B 249.677†	4012.8	4232.8	[100]	ug/L	10:26:08
1	Ba 233.527†	12660.4	12642.3	[100]	ug/L	10:26:08
1	Be 313.107†	274871.5	279490.8	[100]	ug/L	10:26:03
1	Cd 226.502†	8867.0	9055.9	[100]	ug/L	10:26:08
1	Co 228.616†	4514.7	4584.7	[100]	ug/L	10:26:28
1	Cr 267.716†	9292.7	9183.2	[100]	ug/L	10:26:08
1	Cu 324.752†	43820.5	34849.6	[100]	ug/L	10:26:08
1	Mn 257.610†	89198.7	88398.8	[100]	ug/L	10:26:08
1	Mo 202.031†	1498.5	1474.3	[100]	ug/L	10:26:28
1	Ni 231.604†	4041.9	3943.2	[100]	ug/L	10:26:28
1	P 214.914†	1119.7	869.8	[500]	ug/L	10:26:28
1	Pb 220.353†	739.3	784.6	[100]	ug/L	10:26:28
1	S 181.975 Axial†	188.2	134.6	[200]	ug/L	10:26:28
1	Sb 206.836†	331.7	294.3	[100]	ug/L	10:26:28
1	Se 196.026†	154.3	166.1	[100]	ug/L	10:26:28
1	Si 251.611†	17091.9	16550.5	[500]	ug/L	10:26:08
1	Sn 189.927†	544.4	536.7	[100]	ug/L	10:26:28
1	Ti 334.940†	64535.9	65352.3	[100]	ug/L	10:26:08
1	Tl 190.801†	278.4	326.9	[100]	ug/L	10:26:28
1	U 409.014†	2546.1	4085.6	[100]	ug/L	10:26:03
1	V 292.402†	14436.8	15800.3	[100]	ug/L	10:26:08
1	Zn 213.857†	11426.0	10382.4	[100]	ug/L	10:26:08
1	SiO2†	17013.7	16467.1	[1069.5]	ug/L	10:27:34
2	Sc Radial	5492.8	5492.8	102	%	10:25:46
2	Y RADIAL	5912.7	5912.7	101.2	%	10:25:46
2	K 766.490 Radial†	8186.2	5685.9	[1000]	ug/L	10:25:41
2	Sr 421.552†	15882.6	15619.7	[100]	ug/L	10:25:46
2	Sc 361.383	954541.5	954541.5	99.177	%	10:26:33
2	Y 371.029	844609.3	844609.3	98.953	%	10:26:33
2	Ag 328.068†	24519.4	24421.4	[100]	ug/L	10:26:38
2	As 188.979†	196.9	232.6	[100]	ug/L	10:26:58
2	B 249.677†	4121.5	4381.4	[100]	ug/L	10:26:38
2	Ba 233.527†	12729.3	12834.8	[100]	ug/L	10:26:38
2	Be 313.107†	272576.6	279845.6	[100]	ug/L	10:26:33
2	Cd 226.502†	8916.1	9191.5	[100]	ug/L	10:26:38
2	Co 228.616†	4472.5	4586.0	[100]	ug/L	10:26:58
2	Cr 267.716†	9382.0	9363.5	[100]	ug/L	10:26:38
2	Cu 324.752†	43850.7	35305.5	[100]	ug/L	10:26:38
2	Mn 257.610†	89455.0	89523.2	[100]	ug/L	10:26:38
2	Mo 202.031†	1478.2	1468.4	[100]	ug/L	10:26:58
2	Ni 231.604†	3993.4	3933.5	[100]	ug/L	10:26:58
2	P 214.914†	1112.7	873.6	[500]	ug/L	10:26:58
2	Pb 220.353†	751.4	804.0	[100]	ug/L	10:26:58
2	S 181.975 Axial†	191.6	139.9	[200]	ug/L	10:26:58
2	Sb 206.836†	312.9	278.6	[100]	ug/L	10:26:58
2	Se 196.026†	140.5	153.7	[100]	ug/L	10:26:58
2	Si 251.611†	17148.5	16773.6	[500]	ug/L	10:26:38
2	Sn 189.927†	537.4	534.9	[100]	ug/L	10:26:58
2	Ti 334.940†	64838.7	66284.2	[100]	ug/L	10:26:38
2	Tl 190.801†	270.8	321.9	[100]	ug/L	10:26:58
2	U 409.014†	2346.6	3909.1	[100]	ug/L	10:26:33

2	V 292.402†	14528.7	16033.1	[100]	ug/L	10:26:38
2	Zn 213.857†	11513.7	10581.7	[100]	ug/L	10:26:38
2	SiO2†	16915.7	16533.5	[1069.5]	ug/L	10:27:39
3	Sc Radial	5397.1	5397.1	99.8	%	10:25:56
3	Y RADIAL	5815.5	5815.5	99.53	%	10:25:56
3	K 766.490 Radial†	8178.8	5821.3	[1000]	ug/L	10:25:51
3	Sr 421.552†	15577.9	15591.7	[100]	ug/L	10:25:56
3	Sc 361.383	958628.1	958628.1	99.602	%	10:27:04
3	Y 371.029	846808.3	846808.3	99.211	%	10:27:04
3	Ag 328.068†	24222.2	24017.6	[100]	ug/L	10:27:09
3	As 188.979†	218.2	253.2	[100]	ug/L	10:27:29
3	B 249.677†	4026.6	4268.3	[100]	ug/L	10:27:09
3	Ba 233.527†	12585.0	12635.1	[100]	ug/L	10:27:09
3	Be 313.107†	273282.6	279382.8	[100]	ug/L	10:27:04
3	Cd 226.502†	8871.8	9108.7	[100]	ug/L	10:27:09
3	Co 228.616†	4513.0	4607.3	[100]	ug/L	10:27:29
3	Cr 267.716†	9268.7	9209.4	[100]	ug/L	10:27:09
3	Cu 324.752†	43233.8	34497.7	[100]	ug/L	10:27:09
3	Mn 257.610†	88658.2	88338.8	[100]	ug/L	10:27:09
3	Mo 202.031†	1496.1	1480.0	[100]	ug/L	10:27:29
3	Ni 231.604†	4025.6	3948.6	[100]	ug/L	10:27:29
3	P 214.914†	1133.0	889.2	[500]	ug/L	10:27:29
3	Pb 220.353†	736.2	785.6	[100]	ug/L	10:27:29
3	S 181.975 Axial†	191.1	138.6	[200]	ug/L	10:27:29
3	Sb 206.836†	323.1	287.5	[100]	ug/L	10:27:29
3	Se 196.026†	150.8	163.4	[100]	ug/L	10:27:29
3	Si 251.611†	16973.0	16523.6	[500]	ug/L	10:27:09
3	Sn 189.927†	537.2	532.3	[100]	ug/L	10:27:29
3	Ti 334.940†	64033.5	65197.1	[100]	ug/L	10:27:09
3	Tl 190.801†	269.1	319.0	[100]	ug/L	10:27:29
3	U 409.014†	2567.0	4120.3	[100]	ug/L	10:27:04
3	V 292.402†	14353.0	15794.3	[100]	ug/L	10:27:09
3	Zn 213.857†	11397.0	10415.1	[100]	ug/L	10:27:09
3	SiO2†	17052.7	16598.3	[1069.5]	ug/L	10:27:44

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	958997.2	4651.31	0.49%	99.640	%
Sc Radial	5430.2	54.26	1.00%	100	%
Y 371.029	847885.3	3926.86	0.46%	99.337	%
Y RADIAL	5853.7	51.79	0.88%	100.2	%
Ag 328.068†	24137.7	246.69	1.02%	[100]	ug/L
As 188.979†	243.6	10.36	4.25%	[100]	ug/L
B 249.677†	4294.2	77.58	1.81%	[100]	ug/L
Ba 233.527†	12704.1	113.26	0.89%	[100]	ug/L
Be 313.107†	279573.1	242.11	0.09%	[100]	ug/L
Cd 226.502†	9118.7	68.37	0.75%	[100]	ug/L
Co 228.616†	4592.7	12.73	0.28%	[100]	ug/L
Cr 267.716†	9252.1	97.40	1.05%	[100]	ug/L
Cu 324.752†	34884.3	405.04	1.16%	[100]	ug/L
K 766.490 Radial†	5789.6	92.04	1.59%	[1000]	ug/L
Mn 257.610†	88753.6	667.18	0.75%	[100]	ug/L
Mo 202.031†	1474.2	5.79	0.39%	[100]	ug/L
Ni 231.604†	3941.8	7.65	0.19%	[100]	ug/L
P 214.914†	877.5	10.29	1.17%	[500]	ug/L
Pb 220.353†	791.4	10.93	1.38%	[100]	ug/L
S 181.975 Axial†	137.7	2.72	1.98%	[200]	ug/L
Sb 206.836†	286.8	7.89	2.75%	[100]	ug/L
Se 196.026†	161.1	6.55	4.07%	[100]	ug/L
Si 251.611†	16615.9	137.21	0.83%	[500]	ug/L
Sn 189.927†	534.6	2.18	0.41%	[100]	ug/L
Sr 421.552†	15614.0	20.07	0.13%	[100]	ug/L
Ti 334.940†	65611.2	587.98	0.90%	[100]	ug/L
Tl 190.801†	322.6	3.97	1.23%	[100]	ug/L
U 409.014†	4038.3	113.25	2.80%	[100]	ug/L
V 292.402†	15875.9	136.22	0.86%	[100]	ug/L
Zn 213.857†	10459.7	106.93	1.02%	[100]	ug/L
SiO2†	16533.0	65.58	0.40%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 1/29/2010 10:29:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5416.7	5416.7	100	%	10:31:47
1	Y RADIAL	5841.0	5841.0	99.97	%	10:31:47
1	Al 396.153Radial†	6858.1	6843.9	[5000]	ug/L	10:31:47
1	Ca 317.933Radial†	3231.5	3208.8	[5000]	ug/L	10:32:07
1	K 766.490 Radial†	32221.9	29796.0	[5000]	ug/L	10:31:47
1	Mg 279.077 IEC†	157.5	155.9	[5000]	ug/L	10:32:07
1	Sr 421.552†	83693.2	83540.4	[500]	ug/L	10:31:47
1	Sc 361.383	955309.5	955309.5	99.257	%	10:33:05
1	Y 371.029	837810.0	837810.0	98.157	%	10:33:05
1	Ag 328.068†	125132.3	125767.5	[500]	ug/L	10:33:10
1	As 188.979†	1228.2	1271.5	[500]	ug/L	10:33:30
1	B 249.677†	22942.2	23339.5	[500]	ug/L	10:33:10
1	Ba 233.527†	66359.9	66856.4	[500]	ug/L	10:33:10
1	Be 313.107†	1469709.3	1485717.1	[500]	ug/L	10:33:05
1	Cd 226.502†	47173.8	47728.2	[500]	ug/L	10:33:10
1	Co 228.616†	24382.8	24641.6	[500]	ug/L	10:33:10
1	Cr 267.716†	48362.6	48628.3	[500]	ug/L	10:33:10
1	Cu 324.752†	192383.8	184914.7	[500]	ug/L	10:33:10
1	Mn 257.610†	463077.5	465869.6	[500]	ug/L	10:33:05
1	Mo 202.031†	7574.4	7609.0	[500]	ug/L	10:33:30
1	Ni 231.604†	21024.6	21088.9	[500]	ug/L	10:33:10
1	P 214.914†	4868.3	4656.4	[2500]	ug/L	10:33:30
1	Pb 220.353†	4087.3	4164.4	[500]	ug/L	10:33:30
1	S 181.975 Axial†	816.6	769.4	[1000]	ug/L	10:33:30
1	Sb 206.836†	1583.9	1558.8	[500]	ug/L	10:33:30
1	Se 196.026†	868.7	887.2	[500]	ug/L	10:33:30
1	Si 251.611†	88425.6	88570.2	[2500]	ug/L	10:33:10
1	Sn 189.927†	2842.7	2857.0	[500]	ug/L	10:33:30
1	Ti 334.940†	339629.2	343078.8	[500]	ug/L	10:33:10
1	Tl 190.801†	1576.7	1637.4	[500]	ug/L	10:33:30
1	U 409.014†	19627.3	21317.3	[500]	ug/L	10:33:10
1	V 292.402†	82202.7	84201.8	[500]	ug/L	10:33:10
1	Zn 213.857†	57077.5	56477.2	[500]	ug/L	10:33:10
1	SiO2†	88359.3	88498.1	[5347.5]	ug/L	10:34:38
2	Sc Radial	5425.3	5425.3	100	%	10:32:13
2	Y RADIAL	5828.4	5828.4	99.75	%	10:32:13
2	Al 396.153Radial†	6866.5	6841.4	[5000]	ug/L	10:32:13
2	Ca 317.933Radial†	3219.9	3192.0	[5000]	ug/L	10:32:33
2	K 766.490 Radial†	32241.7	29764.7	[5000]	ug/L	10:32:13
2	Mg 279.077 IEC†	159.6	157.8	[5000]	ug/L	10:32:33
2	Sr 421.552†	83956.6	83670.2	[500]	ug/L	10:32:13
2	Sc 361.383	961758.2	961758.2	99.927	%	10:33:36
2	Y 371.029	842807.8	842807.8	98.742	%	10:33:36
2	Ag 328.068†	124703.7	124493.2	[500]	ug/L	10:33:41
2	As 188.979†	1237.4	1272.3	[500]	ug/L	10:34:01
2	B 249.677†	22903.3	23145.6	[500]	ug/L	10:33:41
2	Ba 233.527†	66119.6	66167.6	[500]	ug/L	10:33:41
2	Be 313.107†	1475934.3	1482018.3	[500]	ug/L	10:33:36
2	Cd 226.502†	47295.0	47530.9	[500]	ug/L	10:33:41
2	Co 228.616†	24281.0	24375.0	[500]	ug/L	10:33:41
2	Cr 267.716†	48344.2	48283.2	[500]	ug/L	10:33:41
2	Cu 324.752†	191135.2	182365.6	[500]	ug/L	10:33:41
2	Mn 257.610†	465972.3	465638.3	[500]	ug/L	10:33:36
2	Mo 202.031†	7595.9	7579.3	[500]	ug/L	10:34:01
2	Ni 231.604†	21007.2	20929.5	[500]	ug/L	10:33:41
2	P 214.914†	4869.8	4625.0	[2500]	ug/L	10:34:01
2	Pb 220.353†	4083.5	4132.9	[500]	ug/L	10:34:01
2	S 181.975 Axial†	810.8	758.2	[1000]	ug/L	10:34:01
2	Sb 206.836†	1585.2	1549.5	[500]	ug/L	10:34:01

2	Se 196.026†	884.4	897.0	[500]	ug/L	10:34:01
2	Si 251.611†	87896.3	87443.2	[2500]	ug/L	10:33:41
2	Sn 189.927†	2837.2	2832.3	[500]	ug/L	10:34:01
2	Ti 334.940†	338154.9	339309.1	[500]	ug/L	10:33:41
2	Tl 190.801†	1576.8	1626.8	[500]	ug/L	10:34:01
2	U 409.014†	19453.2	21010.5	[500]	ug/L	10:33:41
2	V 292.402†	82038.0	83481.7	[500]	ug/L	10:33:41
2	Zn 213.857†	57071.3	56085.4	[500]	ug/L	10:33:41
2	SiO2†	88572.5	88114.5	[5347.5]	ug/L	10:34:43
3	Sc Radial	5456.1	5456.1	101	%	10:32:38
3	Y RADIAL	5855.0	5855.0	100.2	%	10:32:38
3	Al 396.153Radial†	6869.8	6806.0	[5000]	ug/L	10:32:38
3	Ca 317.933Radial†	3270.6	3224.1	[5000]	ug/L	10:32:58
3	K 766.490 Radial†	32088.6	29431.3	[5000]	ug/L	10:32:38
3	Mg 279.077 IEC†	161.1	158.4	[5000]	ug/L	10:32:58
3	Sr 421.552†	83663.7	82907.1	[500]	ug/L	10:32:38
3	Sc 361.383	950048.0	950048.0	98.710	%	10:34:07
3	Y 371.029	833850.1	833850.1	97.693	%	10:34:07
3	Ag 328.068†	125142.8	126476.3	[500]	ug/L	10:34:12
3	As 188.979†	1243.1	1293.4	[500]	ug/L	10:34:32
3	B 249.677†	23130.1	23658.0	[500]	ug/L	10:34:12
3	Ba 233.527†	66330.8	67197.1	[500]	ug/L	10:34:12
3	Be 313.107†	1458935.1	1483002.6	[500]	ug/L	10:34:07
3	Cd 226.502†	47281.0	48100.0	[500]	ug/L	10:34:12
3	Co 228.616†	24296.4	24690.1	[500]	ug/L	10:34:12
3	Cr 267.716†	48424.4	48960.7	[500]	ug/L	10:34:12
3	Cu 324.752†	192168.0	185769.6	[500]	ug/L	10:34:12
3	Mn 257.610†	459650.7	464981.7	[500]	ug/L	10:34:07
3	Mo 202.031†	7628.7	7706.3	[500]	ug/L	10:34:32
3	Ni 231.604†	21064.4	21246.5	[500]	ug/L	10:34:12
3	P 214.914†	4893.4	4708.9	[2500]	ug/L	10:34:32
3	Pb 220.353†	4111.5	4211.6	[500]	ug/L	10:34:32
3	S 181.975 Axial†	816.0	773.4	[1000]	ug/L	10:34:32
3	Sb 206.836†	1582.5	1566.2	[500]	ug/L	10:34:32
3	Se 196.026†	884.1	907.7	[500]	ug/L	10:34:32
3	Si 251.611†	88140.0	88774.3	[2500]	ug/L	10:34:12
3	Sn 189.927†	2853.4	2883.7	[500]	ug/L	10:34:32
3	Ti 334.940†	339529.9	344873.2	[500]	ug/L	10:34:12
3	Tl 190.801†	1571.7	1641.1	[500]	ug/L	10:34:32
3	U 409.014†	19565.0	21363.6	[500]	ug/L	10:34:12
3	V 292.402†	82426.9	84887.6	[500]	ug/L	10:34:12
3	Zn 213.857†	57025.4	56742.9	[500]	ug/L	10:34:12
3	SiO2†	87708.6	88331.9	[5347.5]	ug/L	10:34:48

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	955705.2	5865.13	0.61%	99.298	%
Sc Radial	5432.7	20.74	0.38%	100	%
Y 371.029	838156.0	4488.82	0.54%	98.197	%
Y RADIAL	5841.5	13.29	0.23%	99.98	%
Ag 328.068†	125579.0	1004.87	0.80%	[500]	ug/L
Al 396.153Radial†	6830.5	21.20	0.31%	[5000]	ug/L
As 188.979†	1279.1	12.42	0.97%	[500]	ug/L
B 249.677†	23381.1	258.69	1.11%	[500]	ug/L
Ba 233.527†	66740.4	524.48	0.79%	[500]	ug/L
Be 313.107†	1483579.3	1915.66	0.13%	[500]	ug/L
Ca 317.933Radial†	3208.3	16.07	0.50%	[5000]	ug/L
Cd 226.502†	47786.4	288.98	0.60%	[500]	ug/L
Co 228.616†	24568.9	169.66	0.69%	[500]	ug/L
Cr 267.716†	48624.1	338.80	0.70%	[500]	ug/L
Cu 324.752†	184349.9	1770.88	0.96%	[500]	ug/L
K 766.490 Radial†	29664.0	202.10	0.68%	[5000]	ug/L
Mg 279.077 IEC†	157.4	1.27	0.81%	[5000]	ug/L
Mn 257.610†	465496.5	460.58	0.10%	[500]	ug/L
Mo 202.031†	7631.5	66.40	0.87%	[500]	ug/L
Ni 231.604†	21088.3	158.52	0.75%	[500]	ug/L
P 214.914†	4663.4	42.41	0.91%	[2500]	ug/L
Pb 220.353†	4169.6	39.64	0.95%	[500]	ug/L
S 181.975 Axial†	767.0	7.92	1.03%	[1000]	ug/L

Sb 206.836†	1558.2	8.40	0.54%	[500]	ug/L
Se 196.026†	897.3	10.25	1.14%	[500]	ug/L
Si 251.611†	88262.6	716.89	0.81%	[2500]	ug/L
Sn 189.927†	2857.7	25.71	0.90%	[500]	ug/L
Sr 421.552†	83372.6	408.34	0.49%	[500]	ug/L
Ti 334.940†	342420.4	2839.86	0.83%	[500]	ug/L
Tl 190.801†	1635.1	7.39	0.45%	[500]	ug/L
U 409.014†	21230.5	191.91	0.90%	[500]	ug/L
V 292.402†	84190.4	703.02	0.84%	[500]	ug/L
Zn 213.857†	56435.1	330.75	0.59%	[500]	ug/L
SiO2†	88314.9	192.34	0.22%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 1/29/2010 10:36:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5329.0	5329.0	98.5	%	10:39:12
1	Y RADIAL	5700.6	5700.6	97.57	%	10:39:12
1	Al 396.153Radial†	13332.2	13526.6	[10000]	ug/L	10:38:52
1	Ca 317.933Radial†	6288.9	6364.5	[10000]	ug/L	10:39:12
1	Fe 238.204 Radial†	1154.1	1161.6	[10000]	ug/L	10:39:12
1	K 766.490 Radial†	60319.9	58839.3	[10000]	ug/L	10:38:52
1	Mg 279.077 IEC†	301.7	304.9	[10000]	ug/L	10:39:12
1	Na 589.592 Radial†	34499.7	35900.8	[10000]	ug/L	10:38:52
1	Sr 421.552†	160947.9	163313.9	[1000]	ug/L	10:38:52
1	Sc 361.383	927868.5	927868.5	96.406	%	10:40:16
1	Y 371.029	808833.1	808833.1	94.762	%	10:40:16
1	Ag 328.068†	242999.5	251757.2	[1000]	ug/L	10:40:16
1	As 188.979†	2453.8	2579.3	[1000]	ug/L	10:40:36
1	B 249.677†	45260.2	47173.1	[1000]	ug/L	10:40:16
1	Ba 233.527†	128308.6	133091.7	[1000]	ug/L	10:40:16
1	Be 313.107†	2867753.7	2979671.6	[1000]	ug/L	10:40:11
1	Cd 226.502†	91109.2	94707.1	[1000]	ug/L	10:40:16
1	Co 228.616†	47066.5	48897.5	[1000]	ug/L	10:40:16
1	Cr 267.716†	93508.9	96898.6	[1000]	ug/L	10:40:16
1	Cu 324.752†	366402.1	371152.6	[1000]	ug/L	10:40:16
1	Mn 257.610†	902185.5	935145.2	[1000]	ug/L	10:40:11
1	Mo 202.031†	14872.0	15404.4	[1000]	ug/L	10:40:36
1	Ni 231.604†	40432.5	41846.8	[1000]	ug/L	10:40:16
1	P 214.914†	9302.0	9400.4	[5000]	ug/L	10:40:36
1	Pb 220.353†	8027.1	8372.8	[1000]	ug/L	10:40:36
1	S 181.975 Axial†	1546.2	1550.6	[2000]	ug/L	10:40:36
1	Sb 206.836†	3088.6	3166.8	[1000]	ug/L	10:40:36
1	Se 196.026†	1735.1	1811.8	[1000]	ug/L	10:40:36
1	Si 251.611†	171589.9	177469.6	[5000]	ug/L	10:40:16
1	Sn 189.927†	5580.8	5781.9	[1000]	ug/L	10:40:36
1	Ti 334.940†	680792.1	707079.7	[1000]	ug/L	10:40:11
1	Tl 190.801†	3102.4	3266.9	[1000]	ug/L	10:40:36
1	U 409.014†	39102.6	42103.4	[1000]	ug/L	10:40:16
1	V 292.402†	161327.0	168725.1	[1000]	ug/L	10:40:16
1	Zn 213.857†	109421.3	112473.0	[1000]	ug/L	10:40:16
1	SiO2†	169934.8	175747.4	[10695]	ug/L	10:41:45
2	Sc Radial	5326.0	5326.0	98.5	%	10:39:38
2	Y RADIAL	5712.2	5712.2	97.77	%	10:39:38
2	Al 396.153Radial†	13369.7	13572.2	[10000]	ug/L	10:39:18
2	Ca 317.933Radial†	6291.9	6371.1	[10000]	ug/L	10:39:38
2	Fe 238.204 Radial†	1151.3	1159.4	[10000]	ug/L	10:39:38
2	K 766.490 Radial†	60036.6	58586.0	[10000]	ug/L	10:39:18
2	Mg 279.077 IEC†	306.4	309.8	[10000]	ug/L	10:39:38
2	Na 589.592 Radial†	34198.8	35614.9	[10000]	ug/L	10:39:18
2	Sr 421.552†	160399.1	162848.1	[1000]	ug/L	10:39:18
2	Sc 361.383	929341.7	929341.7	96.559	%	10:40:48
2	Y 371.029	810887.5	810887.5	95.003	%	10:40:48
2	Ag 328.068†	243234.3	251600.8	[1000]	ug/L	10:40:48
2	As 188.979†	2433.7	2554.5	[1000]	ug/L	10:41:08
2	B 249.677†	45364.4	47206.7	[1000]	ug/L	10:40:48
2	Ba 233.527†	128507.8	133087.1	[1000]	ug/L	10:40:48
2	Be 313.107†	2861867.9	2968860.5	[1000]	ug/L	10:40:42
2	Cd 226.502†	91281.5	94735.8	[1000]	ug/L	10:40:48
2	Co 228.616†	47100.9	48855.7	[1000]	ug/L	10:40:48
2	Cr 267.716†	93745.1	96989.5	[1000]	ug/L	10:40:48
2	Cu 324.752†	366936.1	371103.2	[1000]	ug/L	10:40:48
2	Mn 257.610†	899229.8	930600.6	[1000]	ug/L	10:40:42
2	Mo 202.031†	14775.5	15280.0	[1000]	ug/L	10:41:08
2	Ni 231.604†	40360.0	41705.2	[1000]	ug/L	10:40:48

2	P 214.914†	9248.7	9329.9	[5000]	ug/L	10:41:08
2	Pb 220.353†	7993.0	8324.3	[1000]	ug/L	10:41:08
2	S 181.975 Axial†	1540.2	1541.8	[2000]	ug/L	10:41:08
2	Sb 206.836†	3033.6	3104.8	[1000]	ug/L	10:41:08
2	Se 196.026†	1715.9	1789.1	[1000]	ug/L	10:41:08
2	Si 251.611†	171266.8	176852.8	[5000]	ug/L	10:40:48
2	Sn 189.927†	5578.5	5770.3	[1000]	ug/L	10:41:08
2	Ti 334.940†	679405.5	704524.3	[1000]	ug/L	10:40:42
2	Tl 190.801†	3085.7	3244.5	[1000]	ug/L	10:41:08
2	U 409.014†	39018.2	41951.7	[1000]	ug/L	10:40:48
2	V 292.402†	161633.4	168777.2	[1000]	ug/L	10:40:48
2	Zn 213.857†	109462.8	112336.1	[1000]	ug/L	10:40:48
2	SiO2†	171143.9	176720.2	[10695]	ug/L	10:41:51
3	Sc Radial	5281.8	5281.8	97.7	%	10:40:03
3	Y RADIAL	5674.8	5674.8	97.13	%	10:40:03
3	Al 396.153Radial†	13199.9	13512.1	[10000]	ug/L	10:39:43
3	Ca 317.933Radial†	6229.1	6360.3	[10000]	ug/L	10:40:03
3	Fe 238.204 Radial†	1141.9	1159.6	[10000]	ug/L	10:40:03
3	K 766.490 Radial†	59452.1	58497.7	[10000]	ug/L	10:39:43
3	Mg 279.077 IEC†	301.6	307.5	[10000]	ug/L	10:40:03
3	Na 589.592 Radial†	33644.1	35337.7	[10000]	ug/L	10:39:43
3	Sr 421.552†	158036.4	161792.2	[1000]	ug/L	10:39:43
3	Sc 361.383	928599.1	928599.1	96.482	%	10:41:20
3	Y 371.029	808608.4	808608.4	94.736	%	10:41:20
3	Ag 328.068†	242620.8	251166.3	[1000]	ug/L	10:41:20
3	As 188.979†	2458.0	2581.7	[1000]	ug/L	10:41:40
3	B 249.677†	45289.1	47166.2	[1000]	ug/L	10:41:20
3	Ba 233.527†	128442.5	133125.8	[1000]	ug/L	10:41:20
3	Be 313.107†	2862948.9	2972351.0	[1000]	ug/L	10:41:14
3	Cd 226.502†	91108.3	94631.8	[1000]	ug/L	10:41:20
3	Co 228.616†	46861.7	48646.7	[1000]	ug/L	10:41:20
3	Cr 267.716†	93513.3	96826.8	[1000]	ug/L	10:41:20
3	Cu 324.752†	365659.5	370083.9	[1000]	ug/L	10:41:20
3	Mn 257.610†	898428.5	930514.9	[1000]	ug/L	10:41:14
3	Mo 202.031†	14843.8	15363.0	[1000]	ug/L	10:41:40
3	Ni 231.604†	40328.6	41706.1	[1000]	ug/L	10:41:20
3	P 214.914†	9295.4	9385.9	[5000]	ug/L	10:41:40
3	Pb 220.353†	8017.6	8356.4	[1000]	ug/L	10:41:40
3	S 181.975 Axial†	1558.7	1562.2	[2000]	ug/L	10:41:40
3	Sb 206.836†	3072.9	3148.1	[1000]	ug/L	10:41:40
3	Se 196.026†	1727.3	1802.3	[1000]	ug/L	10:41:40
3	Si 251.611†	171239.1	176965.9	[5000]	ug/L	10:41:20
3	Sn 189.927†	5586.8	5783.6	[1000]	ug/L	10:41:40
3	Ti 334.940†	678063.0	703695.5	[1000]	ug/L	10:41:14
3	Tl 190.801†	3081.5	3242.7	[1000]	ug/L	10:41:40
3	U 409.014†	38990.5	41955.3	[1000]	ug/L	10:41:20
3	V 292.402†	161143.4	168403.2	[1000]	ug/L	10:41:20
3	Zn 213.857†	109169.0	112122.2	[1000]	ug/L	10:41:20
3	SiO2†	170780.5	176485.2	[10695]	ug/L	10:41:56

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	928603.1	736.62	0.08%	96.482	%
Sc Radial	5312.3	26.43	0.50%	98.2	%
Y 371.029	809443.0	1256.02	0.16%	94.833	%
Y RADIAL	5695.9	19.14	0.34%	97.49	%
Ag 328.068†	251508.1	306.16	0.12%	[1000]	ug/L
Al 396.153Radial†	13536.9	31.39	0.23%	[10000]	ug/L
As 188.979†	2571.8	15.05	0.59%	[1000]	ug/L
B 249.677†	47182.0	21.68	0.05%	[1000]	ug/L
Ba 233.527†	133101.6	21.14	0.02%	[1000]	ug/L
Be 313.107†	2973627.7	5517.46	0.19%	[1000]	ug/L
Ca 317.933Radial†	6365.3	5.46	0.09%	[10000]	ug/L
Cd 226.502†	94691.6	53.69	0.06%	[1000]	ug/L
Co 228.616†	48800.0	134.33	0.28%	[1000]	ug/L
Cr 267.716†	96905.0	81.49	0.08%	[1000]	ug/L
Cu 324.752†	370779.9	603.25	0.16%	[1000]	ug/L
Fe 238.204 Radial†	1160.2	1.23	0.11%	[10000]	ug/L
K 766.490 Radial†	58641.0	177.31	0.30%	[10000]	ug/L

Mg 279.077 IEC†	307.4	2.49	0.81%	[10000]	ug/L
Mn 257.610†	932086.9	2648.91	0.28%	[1000]	ug/L
Mo 202.031†	15349.1	63.32	0.41%	[1000]	ug/L
Na 589.592 Radial†	35617.8	281.60	0.79%	[10000]	ug/L
Ni 231.604†	41752.7	81.49	0.20%	[1000]	ug/L
P 214.914†	9372.1	37.26	0.40%	[5000]	ug/L
Pb 220.353†	8351.1	24.67	0.30%	[1000]	ug/L
S 181.975 Axial†	1551.5	10.25	0.66%	[2000]	ug/L
Sb 206.836†	3139.9	31.81	1.01%	[1000]	ug/L
Se 196.026†	1801.1	11.44	0.64%	[1000]	ug/L
Si 251.611†	177096.1	328.37	0.19%	[5000]	ug/L
Sn 189.927†	5778.6	7.20	0.12%	[1000]	ug/L
Sr 421.552†	162651.4	779.69	0.48%	[1000]	ug/L
Ti 334.940†	705099.8	1764.01	0.25%	[1000]	ug/L
Tl 190.801†	3251.4	13.48	0.41%	[1000]	ug/L
U 409.014†	42003.5	86.59	0.21%	[1000]	ug/L
V 292.402†	168635.2	202.60	0.12%	[1000]	ug/L
Zn 213.857†	112310.4	176.80	0.16%	[1000]	ug/L
SiO2†	176317.6	507.61	0.29%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/29/2010 10:44:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5239.7	5239.7	96.9	%	10:46:21
1	Y RADIAL	5648.0	5648.0	96.67	%	10:46:21
1	Al 396.153Radial†	66714.8	68853.0	[50000]	ug/L	10:46:01
1	Ca 317.933Radial†	30499.1	31460.4	[50000]	ug/L	10:46:01
1	Fe 238.204 Radial†	2178.6	2238.9	[20000]	ug/L	10:46:21
1	Mg 279.077 IEC†	1437.0	1481.8	[50000]	ug/L	10:46:21
1	Na 589.592 Radial†	64704.8	67671.8	[20000]	ug/L	10:46:01
1	Sc 361.383	935164.1	935164.1	97.164	%	10:47:18
1	Y 371.029	814857.5	814857.5	95.468	%	10:47:18
2	Sc Radial	5244.9	5244.9	97.0	%	10:46:46
2	Y RADIAL	5639.7	5639.7	96.52	%	10:46:46
2	Al 396.153Radial†	66595.2	68662.2	[50000]	ug/L	10:46:26
2	Ca 317.933Radial†	30528.5	31459.8	[50000]	ug/L	10:46:26
2	Fe 238.204 Radial†	2181.0	2239.1	[20000]	ug/L	10:46:46
2	Mg 279.077 IEC†	1443.7	1487.3	[50000]	ug/L	10:46:46
2	Na 589.592 Radial†	64683.6	67584.5	[20000]	ug/L	10:46:26
2	Sc 361.383	930102.6	930102.6	96.638	%	10:47:24
2	Y 371.029	811815.3	811815.3	95.111	%	10:47:24
3	Sc Radial	5198.9	5198.9	96.1	%	10:47:11
3	Y RADIAL	5617.4	5617.4	96.14	%	10:47:11
3	Al 396.153Radial†	67277.2	69978.6	[50000]	ug/L	10:46:51
3	Ca 317.933Radial†	30662.9	31878.0	[50000]	ug/L	10:46:51
3	Fe 238.204 Radial†	2171.8	2249.5	[20000]	ug/L	10:47:11
3	Mg 279.077 IEC†	1431.9	1488.1	[50000]	ug/L	10:47:11
3	Na 589.592 Radial†	64956.3	68457.8	[20000]	ug/L	10:46:51
3	Sc 361.383	949408.9	949408.9	98.644	%	10:47:29
3	Y 371.029	828206.5	828206.5	97.032	%	10:47:29

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	938225.2	10010.54	1.07%	97.482	%
Sc Radial	5227.8	25.18	0.48%	96.7	%
Y 371.029	818293.1	8718.95	1.07%	95.870	%
Y RADIAL	5635.0	15.82	0.28%	96.44	%
Al 396.153Radial†	69164.6	711.37	1.03%	[50000]	ug/L
Ca 317.933Radial†	31599.4	241.25	0.76%	[50000]	ug/L
Fe 238.204 Radial†	2242.5	6.04	0.27%	[20000]	ug/L
Mg 279.077 IEC†	1485.7	3.45	0.23%	[50000]	ug/L
Na 589.592 Radial†	67904.7	481.00	0.71%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	251.4	0.00000	0.999994	
Al 396.153Radial	3	Lin Thru 0	0.0	1.382	0.00000	0.999991	
As 188.979	3	Lin Thru 0	0.0	2.568	0.00000	0.999987	
B 249.677	3	Lin Thru 0	0.0	47.07	0.00000	0.999963	
Ba 233.527	3	Lin Thru 0	0.0	133.1	0.00000	0.999991	
Be 313.107	3	Lin Thru 0	0.0	2971	0.00000	0.999986	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6323	0.00000	0.999998	
Cd 226.502	3	Lin Thru 0	0.0	94.84	0.00000	0.999987	
Co 228.616	3	Lin Thru 0	0.0	48.84	0.00000	0.999982	
Cr 267.716	3	Lin Thru 0	0.0	96.94	0.00000	0.999991	
Cu 324.752	3	Lin Thru 0	0.0	370.2	0.00000	0.999984	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1129	0.00000	0.999905	
K 766.490 Radial	3	Lin Thru 0	0.0	5.877	0.00000	0.999988	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0298	0.00000	0.999963
Mn 257.610	3	Lin Thru 0	0.0	931.5	0.00000	0.999991
Mo 202.031	3	Lin Thru 0	0.0	15.33	0.00000	0.999992
Na 589.592 Radia	2	Lin Thru 0	0.0	3.429	0.00000	0.999811
Ni 231.604	3	Lin Thru 0	0.0	41.82	0.00000	0.999979
P 214.914	3	Lin Thru 0	0.0	1.872	0.00000	0.999983
Pb 220.353	3	Lin Thru 0	0.0	8.345	0.00000	0.999989
S 181.975 Axial	3	Lin Thru 0	0.0	0.7733	0.00000	0.999942
Sb 206.836	3	Lin Thru 0	0.0	3.133	0.00000	0.999967
Se 196.026	3	Lin Thru 0	0.0	1.798	0.00000	0.999955
Si 251.611	3	Lin Thru 0	0.0	35.38	0.00000	0.999984
Sn 189.927	3	Lin Thru 0	0.0	5.763	0.00000	0.999970
Sr 421.552	3	Lin Thru 0	0.0	163.4	0.00000	0.999942
Ti 334.940	3	Lin Thru 0	0.0	700.7	0.00000	0.999917
Tl 190.801	3	Lin Thru 0	0.0	3.255	0.00000	0.999997
U 409.014	3	Lin Thru 0	0.0	42.08	0.00000	0.999984
V 292.402	3	Lin Thru 0	0.0	168.5	0.00000	0.999986
Zn 213.857	3	Lin Thru 0	0.0	112.4	0.00000	0.999979
SiO2	3	Lin Thru 0	0.0	16.48	0.00000	0.999984

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 1/29/2010 10:49:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5329.8	5329.8	98.6	%			10:51:34
1	Y RADIAL	5770.2	5770.2	98.76	%			10:51:34
1	Al 396.153Radial†	6769.2	6865.3	4941.8	ug/L	4941.8	ppb	10:51:34
1	Ca 317.933Radial†	3195.1	3224.4	5099.9	ug/L	5099.9	ppb	10:51:54
1	Fe 238.204 Radial†	589.9	589.0	5231.6	ug/L	5231.6	ppb	10:51:54
1	K 766.490 Radial†	17022.7	14898.3	2531.4	ug/L	2531.4	ppb	10:51:34
1	Mg 279.077 IEC†	165.0	166.1	5579.3	ug/L	5579.3	ppb	10:51:54
1	Na 589.592 Radial†	7541.8	8542.6	2491.6	ug/L	2491.6	ppb	10:51:34
1	Sr 421.552†	83142.6	84343.3	516.10	ug/L	516.10	ppb	10:51:34
1	Sc 361.383	959613.9	959613.9	99.704	%			10:52:52
1	Y 371.029	845695.8	845695.8	99.081	%			10:52:52
1	Ag 328.068†	64384.4	64274.0	258.97	ug/L	258.97	ppb	10:52:52
1	As 188.979†	1187.6	1225.2	481.28	ug/L	481.28	ppb	10:53:12
1	B 249.677†	23953.9	24250.7	512.98	ug/L	512.98	ppb	10:52:52
1	Ba 233.527†	67440.4	67640.2	509.35	ug/L	509.35	ppb	10:52:52
1	Be 313.107†	761216.4	768481.5	259.78	ug/L	259.78	ppb	10:52:52
1	Cd 226.502†	46947.6	47288.2	498.49	ug/L	498.49	ppb	10:52:52
1	Co 228.616†	24312.2	24460.7	500.95	ug/L	500.95	ppb	10:53:12
1	Cr 267.716†	47320.0	47364.0	489.22	ug/L	489.22	ppb	10:52:52
1	Cu 324.752†	196597.4	188271.4	508.58	ug/L	508.58	ppb	10:52:52
1	Mn 257.610†	473601.5	474332.0	509.49	ug/L	509.49	ppb	10:52:52
1	Mo 202.031†	8170.9	8173.1	533.70	ug/L	533.70	ppb	10:53:12
1	Ni 231.604†	20764.3	20732.9	495.48	ug/L	495.48	ppb	10:53:12
1	P 214.914†	4928.8	4695.1	2409.5	ug/L	2409.5	ppb	10:53:12
1	Pb 220.353†	4127.6	4186.3	503.33	ug/L	503.33	ppb	10:53:12
1	S 181.975 Axial†	1957.7	1910.2	2469.1	ug/L	2469.1	ppb	10:53:12
1	Sb 206.836†	1583.1	1550.8	514.35	ug/L	514.35	ppb	10:53:12
1	Se 196.026†	4606.6	4632.3	2595.1	ug/L	2595.1	ppb	10:53:12
1	Si 251.611†	170680.5	170669.4	4817.4	ug/L	4817.4	ppb	10:52:52
1	Sn 189.927†	3051.6	3053.7	530.77	ug/L	530.77	ppb	10:53:12
1	Ti 334.940†	343133.8	345058.9	492.29	ug/L	492.29	ppb	10:52:52
1	Tl 190.801†	1669.8	1723.6	532.90	ug/L	532.90	ppb	10:53:12
1	U 409.014†	18776.6	20375.3	482.50	ug/L	482.50	ppb	10:52:52
1	V 292.402†	83520.0	85151.5	512.44	ug/L	512.44	ppb	10:52:52
1	Zn 213.857†	57834.1	56978.0	502.75	ug/L	502.75	ppb	10:52:52
1	SiO2†	169937.2	169918.6	10294	ug/L	10294	ppb	10:54:09
2	Sc Radial	5366.0	5366.0	99.2	%			10:51:59
2	Y RADIAL	5793.8	5793.8	99.16	%			10:51:59
2	Al 396.153Radial†	6850.9	6901.3	4967.7	ug/L	4967.7	ppb	10:51:59
2	Ca 317.933Radial†	3209.1	3216.5	5087.4	ug/L	5087.4	ppb	10:52:19
2	Fe 238.204 Radial†	591.6	586.6	5210.5	ug/L	5210.5	ppb	10:52:19
2	K 766.490 Radial†	17011.9	14770.8	2509.8	ug/L	2509.8	ppb	10:51:59
2	Mg 279.077 IEC†	162.2	162.2	5447.4	ug/L	5447.4	ppb	10:52:19
2	Na 589.592 Radial†	7636.9	8586.8	2504.5	ug/L	2504.5	ppb	10:51:59
2	Sr 421.552†	83679.8	84315.1	515.93	ug/L	515.93	ppb	10:51:59
2	Sc 361.383	952000.1	952000.1	98.913	%			10:53:18
2	Y 371.029	840201.7	840201.7	98.437	%			10:53:18
2	Ag 328.068†	63897.1	64297.8	259.07	ug/L	259.07	ppb	10:53:18
2	As 188.979†	1188.5	1235.6	485.34	ug/L	485.34	ppb	10:53:38
2	B 249.677†	23750.8	24237.4	512.69	ug/L	512.69	ppb	10:53:18
2	Ba 233.527†	66842.4	67576.6	508.88	ug/L	508.88	ppb	10:53:18
2	Be 313.107†	756444.3	769763.1	260.22	ug/L	260.22	ppb	10:53:18
2	Cd 226.502†	46737.9	47452.8	500.23	ug/L	500.23	ppb	10:53:18
2	Co 228.616†	24280.1	24623.2	504.29	ug/L	504.29	ppb	10:53:38
2	Cr 267.716†	47008.5	47428.7	489.89	ug/L	489.89	ppb	10:53:18
2	Cu 324.752†	194424.2	187651.3	506.91	ug/L	506.91	ppb	10:53:18
2	Mn 257.610†	470421.0	474915.6	510.12	ug/L	510.12	ppb	10:53:18
2	Mo 202.031†	8155.8	8223.3	536.98	ug/L	536.98	ppb	10:53:38
2	Ni 231.604†	20767.7	20902.8	499.54	ug/L	499.54	ppb	10:53:38

2	P 214.914†	4907.8	4713.3	2419.6 ug/L	2419.6 ppb	10:53:38
2	Pb 220.353†	4128.7	4220.5	507.44 ug/L	507.44 ppb	10:53:38
2	S 181.975 Axial†	1948.7	1916.8	2477.7 ug/L	2477.7 ppb	10:53:38
2	Sb 206.836†	1591.1	1571.6	521.11 ug/L	521.11 ppb	10:53:38
2	Se 196.026†	4592.0	4654.5	2607.4 ug/L	2607.4 ppb	10:53:38
2	Si 251.611†	169448.5	170793.0	4820.9 ug/L	4820.9 ppb	10:53:18
2	Sn 189.927†	3045.5	3072.0	533.95 ug/L	533.95 ppb	10:53:38
2	Ti 334.940†	340053.8	344697.5	491.79 ug/L	491.79 ppb	10:53:18
2	Tl 190.801†	1650.1	1717.0	530.88 ug/L	530.88 ppb	10:53:38
2	U 409.014†	18549.4	20296.2	480.62 ug/L	480.62 ppb	10:53:18
2	V 292.402†	82935.2	85230.3	512.95 ug/L	512.95 ppb	10:53:18
2	Zn 213.857†	57412.3	57015.6	503.06 ug/L	503.06 ppb	10:53:18
2	SiO2†	168861.9	170194.6	10310 ug/L	10310 ppb	10:54:15
3	Sc Radial	5343.7	5343.7	98.8 %		10:52:24
3	Y RADIAL	5717.4	5717.4	97.85 %		10:52:24
3	Al 396.153Radial†	6817.3	6896.2	4963.9 ug/L	4963.9 ppb	10:52:24
3	Ca 317.933Radial†	3199.0	3219.9	5092.7 ug/L	5092.7 ppb	10:52:44
3	Fe 238.204 Radial†	589.8	587.3	5216.9 ug/L	5216.9 ppb	10:52:44
3	K 766.490 Radial†	17065.8	14897.1	2531.2 ug/L	2531.2 ppb	10:52:24
3	Mg 279.077 IEC†	157.4	158.0	5307.4 ug/L	5307.4 ppb	10:52:44
3	Na 589.592 Radial†	7666.4	8648.8	2522.6 ug/L	2522.6 ppb	10:52:24
3	Sr 421.552†	83761.0	84749.7	518.59 ug/L	518.59 ppb	10:52:24
3	Sc 361.383	955029.7	955029.7	99.228 %		10:53:44
3	Y 371.029	841964.3	841964.3	98.644 %		10:53:44
3	Ag 328.068†	64321.2	64520.2	259.95 ug/L	259.95 ppb	10:53:44
3	As 188.979†	1197.0	1240.3	487.18 ug/L	487.18 ppb	10:54:04
3	B 249.677†	23966.0	24378.1	515.68 ug/L	515.68 ppb	10:53:44
3	Ba 233.527†	67343.9	67867.6	511.06 ug/L	511.06 ppb	10:53:44
3	Be 313.107†	760051.0	770971.8	260.63 ug/L	260.63 ppb	10:53:44
3	Cd 226.502†	46996.6	47563.7	501.40 ug/L	501.40 ppb	10:53:44
3	Co 228.616†	24401.0	24667.1	505.19 ug/L	505.19 ppb	10:54:04
3	Cr 267.716†	47311.7	47583.5	491.49 ug/L	491.49 ppb	10:53:44
3	Cu 324.752†	195425.4	188036.8	507.95 ug/L	507.95 ppb	10:53:44
3	Mn 257.610†	473343.4	476352.0	511.67 ug/L	511.67 ppb	10:53:44
3	Mo 202.031†	8196.4	8238.1	537.95 ug/L	537.95 ppb	10:54:04
3	Ni 231.604†	20852.4	20921.6	499.99 ug/L	499.99 ppb	10:54:04
3	P 214.914†	4947.0	4737.1	2432.1 ug/L	2432.1 ppb	10:54:04
3	Pb 220.353†	4133.2	4211.7	506.39 ug/L	506.39 ppb	10:54:04
3	S 181.975 Axial†	1968.3	1930.3	2495.2 ug/L	2495.2 ppb	10:54:04
3	Sb 206.836†	1589.8	1565.3	519.11 ug/L	519.11 ppb	10:54:04
3	Se 196.026†	4604.4	4652.2	2606.2 ug/L	2606.2 ppb	10:54:04
3	Si 251.611†	170289.7	171097.2	4829.5 ug/L	4829.5 ppb	10:53:44
3	Sn 189.927†	3061.1	3078.0	535.00 ug/L	535.00 ppb	10:54:04
3	Ti 334.940†	342385.2	345956.5	493.60 ug/L	493.60 ppb	10:53:44
3	Tl 190.801†	1658.0	1719.7	531.72 ug/L	531.72 ppb	10:54:04
3	U 409.014†	18622.5	20310.4	480.95 ug/L	480.95 ppb	10:53:44
3	V 292.402†	83258.8	85290.4	513.31 ug/L	513.31 ppb	10:53:44
3	Zn 213.857†	57795.9	57218.1	504.86 ug/L	504.86 ppb	10:53:44
3	SiO2†	169959.2	170758.8	10345 ug/L	10345 ppb	10:54:20

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	955547.9	99.282	%	0.3983				0.40%
Sc Radial	5346.5	98.9	%	0.34				0.34%
Y 371.029	842620.6	98.721	%	0.3287				0.33%
Y RADIAL	5760.5	98.59	%	0.670				0.68%
Ag 328.068†	64364.0	259.33	ug/L	0.541	259.33	ppb	0.541	0.21%
QC value within limits for Ag 328.068 Recovery = 103.73%								
Al 396.153Radial†	6887.6	4957.8	ug/L	13.98	4957.8	ppb	13.98	0.28%
QC value within limits for Al 396.153Radial Recovery = 99.16%								
As 188.979†	1233.7	484.60	ug/L	3.019	484.60	ppb	3.019	0.62%
QC value within limits for As 188.979 Recovery = 96.92%								
B 249.677†	24288.7	513.78	ug/L	1.647	513.78	ppb	1.647	0.32%
QC value within limits for B 249.677 Recovery = 102.76%								
Ba 233.527†	67694.8	509.76	ug/L	1.150	509.76	ppb	1.150	0.23%
QC value within limits for Ba 233.527 Recovery = 101.95%								
Be 313.107†	769738.8	260.21	ug/L	0.421	260.21	ppb	0.421	0.16%
QC value within limits for Be 313.107 Recovery = 104.08%								
Ca 317.933Radial†	3220.3	5093.3	ug/L	6.24	5093.3	ppb	6.24	0.12%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.87%
Cd 226.502†            47434.9      500.04 ug/L         1.464      500.04 ppb          1.464   0.29%
   QC value within limits for Cd 226.502  Recovery = 100.01%
Co 228.616†            24583.7      503.48 ug/L         2.231      503.48 ppb          2.231   0.44%
   QC value within limits for Co 228.616  Recovery = 100.70%
Cr 267.716†            47458.7      490.20 ug/L         1.164      490.20 ppb          1.164   0.24%
   QC value within limits for Cr 267.716  Recovery = 98.04%
Cu 324.752†           187986.5      507.81 ug/L         0.846      507.81 ppb          0.846   0.17%
   QC value within limits for Cu 324.752  Recovery = 101.56%
Fe 238.204 Radial†       587.6      5219.6 ug/L         10.80      5219.6 ppb          10.80   0.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.39%
K 766.490 Radial†      14855.4      2524.1 ug/L         12.46      2524.1 ppb          12.46   0.49%
   QC value within limits for K 766.490 Radial  Recovery = 100.97%
Mg 279.077 IEC†          162.1      5444.7 ug/L        135.97      5444.7 ppb         135.97   2.50%
   QC value within limits for Mg 279.077 IEC  Recovery = 108.89%
Mn 257.610†           475199.9      510.43 ug/L         1.121      510.43 ppb          1.121   0.22%
   QC value within limits for Mn 257.610  Recovery = 102.09%
Mo 202.031†             8211.5      536.21 ug/L         2.224      536.21 ppb          2.224   0.41%
   QC value within limits for Mo 202.031  Recovery = 107.24%
Na 589.592 Radial†      8592.7      2506.2 ug/L         15.56      2506.2 ppb          15.56   0.62%
   QC value within limits for Na 589.592 Radial  Recovery = 100.25%
Ni 231.604†            20852.4      498.34 ug/L         2.485      498.34 ppb          2.485   0.50%
   QC value within limits for Ni 231.604  Recovery = 99.67%
P 214.914†              4715.1      2420.4 ug/L         11.33      2420.4 ppb          11.33   0.47%
   QC value within limits for P 214.914  Recovery = 96.82%
Pb 220.353†             4206.2      505.72 ug/L         2.138      505.72 ppb          2.138   0.42%
   QC value within limits for Pb 220.353  Recovery = 101.14%
S 181.975 Axial†        1919.1      2480.7 ug/L         13.26      2480.7 ppb          13.26   0.53%
   QC value within limits for S 181.975 Axial  Recovery = 99.23%
Sb 206.836†             1562.6      518.19 ug/L         3.474      518.19 ppb          3.474   0.67%
   QC value within limits for Sb 206.836  Recovery = 103.64%
Se 196.026†             4646.3      2602.9 ug/L          6.77      2602.9 ppb           6.77   0.26%
   QC value within limits for Se 196.026  Recovery = 104.12%
Si 251.611†           170853.2      4822.6 ug/L          6.20      4822.6 ppb           6.20   0.13%
   QC value within limits for Si 251.611  Recovery = 96.45%
Sn 189.927†             3067.9      533.24 ug/L         2.200      533.24 ppb          2.200   0.41%
   QC value within limits for Sn 189.927  Recovery = 106.65%
Sr 421.552†            84469.4      516.87 ug/L         1.488      516.87 ppb          1.488   0.29%
   QC value within limits for Sr 421.552  Recovery = 103.37%
Ti 334.940†           345237.6      492.56 ug/L         0.933      492.56 ppb          0.933   0.19%
   QC value within limits for Ti 334.940  Recovery = 98.51%
Tl 190.801†             1720.1      531.83 ug/L         1.015      531.83 ppb          1.015   0.19%
   QC value within limits for Tl 190.801  Recovery = 106.37%
U 409.014†             20327.3      481.36 ug/L         1.003      481.36 ppb          1.003   0.21%
   QC value within limits for U 409.014  Recovery = 96.27%
V 292.402†             85224.0      512.90 ug/L         0.440      512.90 ppb          0.440   0.09%
   QC value within limits for V 292.402  Recovery = 102.58%
Zn 213.857†            57070.6      503.56 ug/L         1.139      503.56 ppb          1.139   0.23%
   QC value within limits for Zn 213.857  Recovery = 100.71%
SiO2†                 170290.7       10316 ug/L          25.9       10316 ppb           25.9   0.25%
   QC value within limits for SiO2  Recovery = 96.46%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/29/2010 10:56:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5479.2	5479.2	101	%			10:58:24
1	Y RADIAL	5921.3	5921.3	101.3	%			10:58:24
1	Al 396.153Radial†	16.8	13.5	9.7406	ug/L	9.7406	ppb	10:58:44
1	Ca 317.933Radial†	22.1	4.3	6.8198	ug/L	6.8198	ppb	10:58:44
1	Fe 238.204 Radial†	8.6	-1.1	-9.8861	ug/L	-9.8861	ppb	10:58:44
1	K 766.490 Radial†	2430.2	24.8	4.2282	ug/L	4.2282	ppb	10:58:24
1	Mg 279.077 IEC†	1.4	0.1	2.2861	ug/L	2.2861	ppb	10:58:44
1	Na 589.592 Radial†	-974.8	-71.8	-20.951	ug/L	-20.951	ppb	10:58:24
1	Sr 421.552†	13.6	-4.0	-0.0245	ug/L	-0.0245	ppb	10:58:24
1	Sc 361.383	968472.6	968472.6	100.62	%			10:59:41
1	Y 371.029	860025.5	860025.5	100.76	%			10:59:41
1	Ag 328.068†	346.5	43.0	0.1641	ug/L	0.1641	ppb	10:59:46
1	As 188.979†	-29.6	4.6	1.7839	ug/L	1.7839	ppb	11:00:06
1	B 249.677†	-54.4	171.6	3.6471	ug/L	3.6471	ppb	11:00:06
1	Ba 233.527†	9.7	9.5	0.0712	ug/L	0.0712	ppb	11:00:06
1	Be 313.107†	-4813.9	224.0	0.0752	ug/L	0.0752	ppb	10:59:46
1	Cd 226.502†	-190.9	11.7	0.1253	ug/L	0.1253	ppb	11:00:06
1	Co 228.616†	-63.1	13.6	0.2805	ug/L	0.2805	ppb	11:00:06
1	Cr 267.716†	74.7	-22.1	-0.2297	ug/L	-0.2297	ppb	11:00:06
1	Cu 324.752†	8916.0	-48.3	-0.1337	ug/L	-0.1337	ppb	10:59:46
1	Mn 257.610†	546.5	-130.7	-0.1414	ug/L	-0.1414	ppb	11:00:06
1	Mo 202.031†	33.7	11.4	0.7430	ug/L	0.7430	ppb	11:00:06
1	Ni 231.604†	114.6	20.8	0.4984	ug/L	0.4984	ppb	11:00:06
1	P 214.914†	238.7	-11.1	-5.9133	ug/L	-5.9133	ppb	11:00:06
1	Pb 220.353†	-55.9	-9.1	-1.0893	ug/L	-1.0893	ppb	11:00:06
1	S 181.975 Axial†	46.4	-7.2	-9.2530	ug/L	-9.2530	ppb	11:00:06
1	Sb 206.836†	29.4	-7.7	-2.4377	ug/L	-2.4377	ppb	11:00:06
1	Se 196.026†	-15.8	-3.6	-2.0478	ug/L	-2.0478	ppb	11:00:06
1	Si 251.611†	499.5	-20.8	-0.5985	ug/L	-0.5985	ppb	11:00:06
1	Sn 189.927†	4.2	-2.8	-0.4883	ug/L	-0.4883	ppb	11:00:06
1	Ti 334.940†	-979.5	-65.7	-0.0951	ug/L	-0.0951	ppb	10:59:46
1	Tl 190.801†	-37.3	11.8	3.6159	ug/L	3.6159	ppb	11:00:06
1	U 409.014†	-1348.2	203.2	4.8310	ug/L	4.8310	ppb	10:59:41
1	V 292.402†	-1375.8	16.6	0.1201	ug/L	0.1201	ppb	10:59:46
1	Zn 213.857†	800.3	-232.1	-2.0680	ug/L	-2.0680	ppb	11:00:06
1	SiO2†	520.7	-5.1	-0.3271	ug/L	-0.3271	ppb	11:01:12
2	Sc Radial	5440.2	5440.2	101	%			10:58:49
2	Y RADIAL	5897.2	5897.2	100.9	%			10:58:49
2	Al 396.153Radial†	12.9	9.7	7.0528	ug/L	7.0528	ppb	10:59:09
2	Ca 317.933Radial†	19.9	2.2	3.4722	ug/L	3.4722	ppb	10:59:09
2	Fe 238.204 Radial†	11.4	1.7	14.925	ug/L	14.925	ppb	10:59:09
2	K 766.490 Radial†	2569.8	180.8	30.766	ug/L	30.766	ppb	10:58:49
2	Mg 279.077 IEC†	1.2	-0.1	-3.7498	ug/L	-3.7498	ppb	10:59:09
2	Na 589.592 Radial†	-988.8	-92.7	-27.030	ug/L	-27.030	ppb	10:58:49
2	Sr 421.552†	9.4	-8.1	-0.0495	ug/L	-0.0495	ppb	10:58:49
2	Sc 361.383	980882.8	980882.8	101.91	%			11:00:11
2	Y 371.029	871781.4	871781.4	102.14	%			11:00:11
2	Ag 328.068†	355.5	47.5	0.1925	ug/L	0.1925	ppb	11:00:16
2	As 188.979†	-28.9	5.7	2.2106	ug/L	2.2106	ppb	11:00:36
2	B 249.677†	-101.5	126.1	2.6776	ug/L	2.6776	ppb	11:00:36
2	Ba 233.527†	8.0	7.6	0.0580	ug/L	0.0580	ppb	11:00:36
2	Be 313.107†	-4929.4	171.1	0.0575	ug/L	0.0575	ppb	11:00:16
2	Cd 226.502†	-202.3	2.9	0.0294	ug/L	0.0294	ppb	11:00:36
2	Co 228.616†	-78.5	-0.7	-0.0147	ug/L	-0.0147	ppb	11:00:36
2	Cr 267.716†	74.7	-23.0	-0.2376	ug/L	-0.2376	ppb	11:00:36
2	Cu 324.752†	9108.2	28.2	0.0758	ug/L	0.0758	ppb	11:00:16
2	Mn 257.610†	542.6	-141.4	-0.1502	ug/L	-0.1502	ppb	11:00:36
2	Mo 202.031†	22.8	0.3	0.0213	ug/L	0.0213	ppb	11:00:36
2	Ni 231.604†	95.3	0.5	0.0114	ug/L	0.0114	ppb	11:00:36

2	P 214.914†	241.1	-11.8	-6.3206 ug/L	-6.3206 ppb	11:00:36
2	Pb 220.353†	-55.0	-7.6	-0.9078 ug/L	-0.9078 ppb	11:00:36
2	S 181.975 Axial†	39.8	-14.2	-18.366 ug/L	-18.366 ppb	11:00:36
2	Sb 206.836†	45.8	8.1	2.5734 ug/L	2.5734 ppb	11:00:36
2	Se 196.026†	-20.4	-7.9	-4.3619 ug/L	-4.3619 ppb	11:00:36
2	Si 251.611†	487.4	-39.0	-1.1012 ug/L	-1.1012 ppb	11:00:36
2	Sn 189.927†	5.2	-1.9	-0.3289 ug/L	-0.3289 ppb	11:00:36
2	Ti 334.940†	-950.3	-24.8	-0.0353 ug/L	-0.0353 ppb	11:00:16
2	Tl 190.801†	-30.8	18.6	5.7252 ug/L	5.7252 ppb	11:00:36
2	U 409.014†	-1493.2	77.9	1.8496 ug/L	1.8496 ppb	11:00:11
2	V 292.402†	-1400.3	9.9	0.0603 ug/L	0.0603 ppb	11:00:16
2	Zn 213.857†	798.0	-244.5	-2.1774 ug/L	-2.1774 ppb	11:00:36
2	SiO2†	508.5	-23.6	-1.4304 ug/L	-1.4304 ppb	11:01:17
3	Sc Radial	5506.9	5506.9	102 %		10:59:14
3	Y RADIAL	5963.9	5963.9	102.1 %		10:59:14
3	Al 396.153Radial†	23.9	20.4	14.754 ug/L	14.754 ppb	10:59:34
3	Ca 317.933Radial†	22.2	4.2	6.7071 ug/L	6.7071 ppb	10:59:34
3	Fe 238.204 Radial†	9.8	0.0	0.0164 ug/L	0.0164 ppb	10:59:34
3	K 766.490 Radial†	2469.8	51.6	8.7857 ug/L	8.7857 ppb	10:59:14
3	Mg 279.077 IEC†	3.5	2.2	72.270 ug/L	72.270 ppb	10:59:34
3	Na 589.592 Radial†	-984.1	-76.1	-22.207 ug/L	-22.207 ppb	10:59:14
3	Sr 421.552†	30.4	12.4	0.0761 ug/L	0.0761 ppb	10:59:14
3	Sc 361.383	969477.3	969477.3	100.73 %		11:00:41
3	Y 371.029	860247.5	860247.5	100.79 %		11:00:41
3	Ag 328.068†	298.7	-4.8	-0.0269 ug/L	-0.0269 ppb	11:00:46
3	As 188.979†	-40.2	-5.9	-2.2968 ug/L	-2.2968 ppb	11:01:07
3	B 249.677†	-111.9	114.6	2.4333 ug/L	2.4333 ppb	11:01:07
3	Ba 233.527†	-13.8	-13.9	-0.1051 ug/L	-0.1051 ppb	11:01:07
3	Be 313.107†	-4995.8	48.3	0.0161 ug/L	0.0161 ppb	11:00:46
3	Cd 226.502†	-189.0	13.8	0.1471 ug/L	0.1471 ppb	11:01:07
3	Co 228.616†	-64.0	12.8	0.2625 ug/L	0.2625 ppb	11:01:07
3	Cr 267.716†	87.2	-9.7	-0.1041 ug/L	-0.1041 ppb	11:01:07
3	Cu 324.752†	8989.1	15.1	0.0363 ug/L	0.0363 ppb	11:00:46
3	Mn 257.610†	552.6	-125.2	-0.1374 ug/L	-0.1374 ppb	11:01:07
3	Mo 202.031†	29.4	7.1	0.4642 ug/L	0.4642 ppb	11:01:07
3	Ni 231.604†	99.4	5.7	0.1356 ug/L	0.1356 ppb	11:01:07
3	P 214.914†	228.3	-21.8	-11.623 ug/L	-11.623 ppb	11:01:07
3	Pb 220.353†	-54.3	-7.5	-0.8988 ug/L	-0.8988 ppb	11:01:07
3	S 181.975 Axial†	44.1	-9.5	-12.271 ug/L	-12.271 ppb	11:01:07
3	Sb 206.836†	37.7	0.5	0.1775 ug/L	0.1775 ppb	11:01:07
3	Se 196.026†	-16.6	-4.5	-2.4809 ug/L	-2.4809 ppb	11:01:07
3	Si 251.611†	507.8	-13.1	-0.3762 ug/L	-0.3762 ppb	11:01:07
3	Sn 189.927†	12.0	4.9	0.8559 ug/L	0.8559 ppb	11:01:07
3	Ti 334.940†	-958.7	-44.1	-0.0713 ug/L	-0.0713 ppb	11:00:46
3	Tl 190.801†	-43.9	5.3	1.6329 ug/L	1.6329 ppb	11:01:07
3	U 409.014†	-1217.4	334.5	7.9482 ug/L	7.9482 ppb	11:00:41
3	V 292.402†	-1442.3	-48.0	-0.2615 ug/L	-0.2615 ppb	11:00:46
3	Zn 213.857†	805.9	-227.5	-2.0254 ug/L	-2.0254 ppb	11:01:07
3	SiO2†	478.0	-48.0	-2.9250 ug/L	-2.9250 ppb	11:01:22

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	972944.2	101.09	%	0.716				0.71%
Sc Radial	5475.4	101	%	0.6				0.61%
Y 371.029	864018.1	101.23	%	0.788				0.78%
Y RADIAL	5927.5	101.4	%	0.58				0.57%
Ag 328.068†	28.5	0.1099	ug/L	0.11933	0.1099	ppb	0.11933	108.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.6	10.516	ug/L	3.9086	10.516	ppb	3.9086	37.17%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.5	0.5659	ug/L	2.48835	0.5659	ppb	2.48835	439.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	137.4	2.9193	ug/L	0.64199	2.9193	ppb	0.64199	21.99%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.1	0.0080	ug/L	0.09817	0.0080	ppb	0.09817	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	147.8	0.0496	ug/L	0.03032	0.0496	ppb	0.03032	61.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.6	5.6664	ug/L	1.90101	5.6664	ppb	1.90101	33.55%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 9.5      0.1006 ug/L       0.06265      0.1006 ppb        0.06265  62.28%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 8.5      0.1761 ug/L       0.16550      0.1761 ppb        0.16550  93.97%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               -18.3     -0.1905 ug/L       0.07490     -0.1905 ppb        0.07490  39.33%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -1.7     -0.0072 ug/L       0.11134     -0.0072 ppb        0.11134 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.2      1.6851 ug/L      12.48953      1.6851 ppb       12.48953 741.15%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          85.7     14.593 ug/L       14.1900      14.593 ppb        14.1900  97.24%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.7     23.602 ug/L       42.2557      23.602 ppb        42.2557 179.03%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -132.4     -0.1430 ug/L       0.00656     -0.1430 ppb        0.00656   4.59%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 6.3      0.4095 ug/L       0.36398      0.4095 ppb        0.36398  88.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -80.2    -23.396 ug/L        3.2093     -23.396 ppb         3.2093  13.72%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 9.0      0.2151 ug/L       0.25304      0.2151 ppb        0.25304 117.62%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -14.9     -7.9523 ug/L       3.18544     -7.9523 ppb        3.18544  40.06%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -8.1     -0.9653 ug/L       0.10744     -0.9653 ppb        0.10744  11.13%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -10.3    -13.297 ug/L        4.6423     -13.297 ppb         4.6423  34.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 0.3      0.1044 ug/L       2.50634      0.1044 ppb        2.50634 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -5.3     -2.9635 ug/L       1.23025     -2.9635 ppb        1.23025  41.51%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -24.3     -0.6920 ug/L       0.37143     -0.6920 ppb        0.37143  53.68%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 0.1      0.0129 ug/L       0.73439      0.0129 ppb        0.73439 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 0.1      0.0007 ug/L       0.06647      0.0007 ppb        0.06647 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -44.9     -0.0673 ug/L       0.03011     -0.0673 ppb        0.03011  44.75%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                11.9      3.6580 ug/L       2.04651      3.6580 ppb        2.04651  55.95%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                205.2      4.8763 ug/L       3.04958      4.8763 ppb        3.04958  62.54%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -7.2     -0.0270 ug/L       0.20525     -0.0270 ppb        0.20525 759.60%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -234.7     -2.0903 ug/L       0.07839     -2.0903 ppb        0.07839   3.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     -25.5     -1.5608 ug/L       1.30388     -1.5608 ppb        1.30388  83.54%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 1/29/2010 11:03:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5405.7	5405.7	100.0	%			11:05:26
1	Y RADIAL	5863.5	5863.5	100.4	%			11:05:26
1	Al 396.153Radial†	287.4	284.4	205.32	ug/L	205.32	ppb	11:05:26
1	Ca 317.933Radial†	163.1	145.6	230.35	ug/L	230.35	ppb	11:05:47
1	Fe 238.204 Radial†	22.5	12.9	114.20	ug/L	114.20	ppb	11:05:47
1	K 766.490 Radial†	3506.7	1134.3	192.79	ug/L	192.79	ppb	11:05:26
1	Mg 279.077 IEC†	11.5	10.1	340.93	ug/L	340.93	ppb	11:05:47
1	Na 589.592 Radial†	140.7	1031.1	300.74	ug/L	300.74	ppb	11:05:26
1	Sr 421.552†	866.9	849.9	5.1993	ug/L	5.1993	ppb	11:05:26
1	Sc 361.383	969347.8	969347.8	100.72	%			11:06:43
1	Y 371.029	861733.4	861733.4	100.96	%			11:06:43
1	Ag 328.068†	1661.0	1347.9	5.3697	ug/L	5.3697	ppb	11:06:48
1	As 188.979†	43.5	77.2	30.109	ug/L	30.109	ppb	11:07:08
1	B 249.677†	2179.5	2389.7	50.740	ug/L	50.740	ppb	11:06:48
1	Ba 233.527†	705.7	700.5	5.2759	ug/L	5.2759	ppb	11:07:08
1	Be 313.107†	10378.5	15312.7	5.1657	ug/L	5.1657	ppb	11:06:48
1	Cd 226.502†	289.5	488.8	5.1571	ug/L	5.1571	ppb	11:07:08
1	Co 228.616†	189.3	264.3	5.4219	ug/L	5.4219	ppb	11:07:08
1	Cr 267.716†	573.4	473.0	4.8663	ug/L	4.8663	ppb	11:07:08
1	Cu 324.752†	12744.5	3745.0	10.091	ug/L	10.091	ppb	11:06:48
1	Mn 257.610†	10450.7	9702.6	10.413	ug/L	10.413	ppb	11:06:48
1	Mo 202.031†	177.6	154.3	10.078	ug/L	10.078	ppb	11:07:08
1	Ni 231.604†	327.3	232.0	5.5436	ug/L	5.5436	ppb	11:07:08
1	P 214.914†	521.1	269.1	141.79	ug/L	141.79	ppb	11:07:08
1	Pb 220.353†	34.9	81.1	9.7746	ug/L	9.7746	ppb	11:07:08
1	S 181.975 Axial†	122.0	67.9	87.713	ug/L	87.713	ppb	11:07:08
1	Sb 206.836†	64.0	26.6	8.8402	ug/L	8.8402	ppb	11:07:08
1	Se 196.026†	31.3	43.1	24.391	ug/L	24.391	ppb	11:07:08
1	Si 251.611†	4033.2	3487.3	98.445	ug/L	98.445	ppb	11:07:08
1	Sn 189.927†	59.6	52.3	9.1043	ug/L	9.1043	ppb	11:07:08
1	Ti 334.940†	2659.9	3548.6	5.0411	ug/L	5.0411	ppb	11:06:48
1	Tl 190.801†	32.9	81.5	25.093	ug/L	25.093	ppb	11:07:08
1	U 409.014†	832.3	2369.4	56.282	ug/L	56.282	ppb	11:06:43
1	V 292.402†	-573.7	814.2	5.0649	ug/L	5.0649	ppb	11:06:48
1	Zn 213.857†	1884.3	843.5	7.4466	ug/L	7.4466	ppb	11:07:08
1	SiO2†	4164.7	3612.5	218.89	ug/L	218.89	ppb	11:08:14
2	Sc Radial	5371.9	5371.9	99.3	%			11:05:52
2	Y RADIAL	5822.8	5822.8	99.66	%			11:05:52
2	Al 396.153Radial†	287.5	286.3	206.69	ug/L	206.69	ppb	11:05:52
2	Ca 317.933Radial†	153.1	136.6	216.00	ug/L	216.00	ppb	11:06:12
2	Fe 238.204 Radial†	22.7	13.3	117.52	ug/L	117.52	ppb	11:06:12
2	K 766.490 Radial†	3401.9	1050.9	178.61	ug/L	178.61	ppb	11:05:52
2	Mg 279.077 IEC†	11.8	10.6	356.26	ug/L	356.26	ppb	11:06:12
2	Na 589.592 Radial†	132.5	1023.7	298.59	ug/L	298.59	ppb	11:05:52
2	Sr 421.552†	849.9	838.2	5.1280	ug/L	5.1280	ppb	11:05:52
2	Sc 361.383	964907.5	964907.5	100.25	%			11:07:14
2	Y 371.029	857265.0	857265.0	100.44	%			11:07:14
2	Ag 328.068†	1699.3	1393.6	5.5485	ug/L	5.5485	ppb	11:07:19
2	As 188.979†	38.6	72.5	28.289	ug/L	28.289	ppb	11:07:39
2	B 249.677†	2217.7	2437.7	51.760	ug/L	51.760	ppb	11:07:19
2	Ba 233.527†	704.0	702.0	5.2863	ug/L	5.2863	ppb	11:07:39
2	Be 313.107†	10377.7	15359.3	5.1810	ug/L	5.1810	ppb	11:07:19
2	Cd 226.502†	296.5	497.2	5.2452	ug/L	5.2452	ppb	11:07:39
2	Co 228.616†	185.5	261.3	5.3627	ug/L	5.3627	ppb	11:07:39
2	Cr 267.716†	566.8	469.1	4.8241	ug/L	4.8241	ppb	11:07:39
2	Cu 324.752†	12649.3	3708.2	9.9907	ug/L	9.9907	ppb	11:07:19
2	Mn 257.610†	10446.7	9746.4	10.460	ug/L	10.460	ppb	11:07:19
2	Mo 202.031†	182.1	159.5	10.420	ug/L	10.420	ppb	11:07:39
2	Ni 231.604†	315.3	221.5	5.2935	ug/L	5.2935	ppb	11:07:39

2	P 214.914†	534.4	284.6	150.14 ug/L	150.14 ppb	11:07:39
2	Pb 220.353†	25.5	71.8	8.6661 ug/L	8.6661 ppb	11:07:39
2	S 181.975 Axial†	120.5	66.9	86.465 ug/L	86.465 ppb	11:07:39
2	Sb 206.836†	66.1	29.0	9.6258 ug/L	9.6258 ppb	11:07:39
2	Se 196.026†	39.4	51.3	28.975 ug/L	28.975 ppb	11:07:39
2	Si 251.611†	4050.3	3522.9	99.446 ug/L	99.446 ppb	11:07:39
2	Sn 189.927†	65.3	58.2	10.132 ug/L	10.132 ppb	11:07:39
2	Ti 334.940†	2532.7	3434.0	4.8731 ug/L	4.8731 ppb	11:07:19
2	Tl 190.801†	23.2	72.0	22.181 ug/L	22.181 ppb	11:07:39
2	U 409.014†	935.5	2476.2	58.819 ug/L	58.819 ppb	11:07:14
2	V 292.402†	-666.6	718.9	4.5090 ug/L	4.5090 ppb	11:07:19
2	Zn 213.857†	1884.9	852.7	7.5300 ug/L	7.5300 ppb	11:07:39
2	SiO2†	4245.1	3711.8	224.90 ug/L	224.90 ppb	11:08:19
3	Sc Radial	5357.6	5357.6	99.1 %		11:06:17
3	Y RADIAL	5816.9	5816.9	99.56 %		11:06:17
3	Al 396.153Radial†	275.5	275.0	198.50 ug/L	198.50 ppb	11:06:17
3	Ca 317.933Radial†	153.4	137.3	217.08 ug/L	217.08 ppb	11:06:37
3	Fe 238.204 Radial†	20.7	11.3	100.32 ug/L	100.32 ppb	11:06:37
3	K 766.490 Radial†	3545.8	1205.3	204.88 ug/L	204.88 ppb	11:06:17
3	Mg 279.077 IEC†	12.2	11.0	371.07 ug/L	371.07 ppb	11:06:37
3	Na 589.592 Radial†	128.6	1020.1	297.53 ug/L	297.53 ppb	11:06:17
3	Sr 421.552†	850.2	840.8	5.1439 ug/L	5.1439 ppb	11:06:17
3	Sc 361.383	959353.4	959353.4	99.677 %		11:07:44
3	Y 371.029	851886.8	851886.8	99.806 %		11:07:44
3	Ag 328.068†	1583.8	1287.5	5.1228 ug/L	5.1228 ppb	11:07:49
3	As 188.979†	42.7	76.8	29.965 ug/L	29.965 ppb	11:08:09
3	B 249.677†	2191.8	2424.5	51.483 ug/L	51.483 ppb	11:07:49
3	Ba 233.527†	707.2	709.3	5.3410 ug/L	5.3410 ppb	11:08:09
3	Be 313.107†	10313.5	15354.8	5.1799 ug/L	5.1799 ppb	11:07:49
3	Cd 226.502†	305.7	508.1	5.3611 ug/L	5.3611 ppb	11:08:09
3	Co 228.616†	190.6	267.5	5.4890 ug/L	5.4890 ppb	11:08:09
3	Cr 267.716†	573.1	478.6	4.9230 ug/L	4.9230 ppb	11:08:09
3	Cu 324.752†	12825.5	3958.1	10.665 ug/L	10.665 ppb	11:07:49
3	Mn 257.610†	10517.9	9878.1	10.599 ug/L	10.599 ppb	11:07:49
3	Mo 202.031†	180.1	158.6	10.358 ug/L	10.358 ppb	11:08:09
3	Ni 231.604†	292.7	200.6	4.7936 ug/L	4.7936 ppb	11:08:09
3	P 214.914†	533.6	287.0	151.26 ug/L	151.26 ppb	11:08:09
3	Pb 220.353†	19.3	65.7	7.9342 ug/L	7.9342 ppb	11:08:09
3	S 181.975 Axial†	123.3	70.4	90.968 ug/L	90.968 ppb	11:08:09
3	Sb 206.836†	67.0	30.3	10.023 ug/L	10.023 ppb	11:08:09
3	Se 196.026†	44.4	56.6	31.849 ug/L	31.849 ppb	11:08:09
3	Si 251.611†	4002.1	3497.9	98.741 ug/L	98.741 ppb	11:08:09
3	Sn 189.927†	57.7	50.9	8.8695 ug/L	8.8695 ppb	11:08:09
3	Ti 334.940†	2654.0	3570.3	5.0669 ug/L	5.0669 ppb	11:07:49
3	Tl 190.801†	29.2	78.1	24.061 ug/L	24.061 ppb	11:08:09
3	U 409.014†	896.0	2441.9	58.006 ug/L	58.006 ppb	11:07:44
3	V 292.402†	-615.5	766.4	4.7906 ug/L	4.7906 ppb	11:07:49
3	Zn 213.857†	1895.6	874.2	7.7256 ug/L	7.7256 ppb	11:08:09
3	SiO2†	4182.0	3673.0	222.54 ug/L	222.54 ppb	11:08:24

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	964536.2	100.22	%	0.520				0.52%
Sc Radial	5378.4	99.5	%	0.46				0.46%
Y 371.029	856961.7	100.40	%	0.578				0.58%
Y RADIAL	5834.4	99.86	%	0.435				0.44%
Ag 328.068†	1343.0	5.3470	ug/L	0.21378	5.3470	ppb	0.21378	4.00%
QC value within limits for Ag 328.068 Recovery = 106.94%								
Al 396.153Radial†	281.9	203.50	ug/L	4.387	203.50	ppb	4.387	2.16%
QC value within limits for Al 396.153Radial Recovery = 101.75%								
As 188.979†	75.5	29.454	ug/L	1.0117	29.454	ppb	1.0117	3.43%
QC value within limits for As 188.979 Recovery = 98.18%								
B 249.677†	2417.3	51.328	ug/L	0.5277	51.328	ppb	0.5277	1.03%
QC value within limits for B 249.677 Recovery = 102.66%								
Ba 233.527†	703.9	5.3010	ug/L	0.03500	5.3010	ppb	0.03500	0.66%
QC value within limits for Ba 233.527 Recovery = 106.02%								
Be 313.107†	15342.3	5.1755	ug/L	0.00855	5.1755	ppb	0.00855	0.17%
QC value within limits for Be 313.107 Recovery = 103.51%								
Ca 317.933Radial†	139.8	221.14	ug/L	7.987	221.14	ppb	7.987	3.61%

QC value within limits for Ca 317.933Radial Recovery = 110.57%

Cd 226.502†	498.0	5.2545 ug/L	0.10231	5.2545 ppb	0.10231	1.95%
QC value within limits for Cd 226.502 Recovery = 105.09%						
Co 228.616†	264.4	5.4245 ug/L	0.06320	5.4245 ppb	0.06320	1.17%
QC value within limits for Co 228.616 Recovery = 108.49%						
Cr 267.716†	473.6	4.8711 ug/L	0.04959	4.8711 ppb	0.04959	1.02%
QC value within limits for Cr 267.716 Recovery = 97.42%						
Cu 324.752†	3803.8	10.249 ug/L	0.3638	10.249 ppb	0.3638	3.55%
QC value within limits for Cu 324.752 Recovery = 102.49%						
Fe 238.204 Radial†	12.5	110.68 ug/L	9.125	110.68 ppb	9.125	8.24%
QC value within limits for Fe 238.204 Radial Recovery = 110.68%						
K 766.490 Radial†	1130.2	192.09 ug/L	13.149	192.09 ppb	13.149	6.85%
QC value within limits for K 766.490 Radial Recovery = 128.06%						
Mg 279.077 IEC†	10.6	356.09 ug/L	15.075	356.09 ppb	15.075	4.23%
QC value within limits for Mg 279.077 IEC Recovery = 118.70%						
Mn 257.610†	9775.7	10.491 ug/L	0.0967	10.491 ppb	0.0967	0.92%
QC value within limits for Mn 257.610 Recovery = 104.91%						
Mo 202.031†	157.5	10.286 ug/L	0.1822	10.286 ppb	0.1822	1.77%
QC value within limits for Mo 202.031 Recovery = 102.86%						
Na 589.592 Radial†	1025.0	298.95 ug/L	1.633	298.95 ppb	1.633	0.55%
QC value within limits for Na 589.592 Radial Recovery = 99.65%						
Ni 231.604†	218.0	5.2102 ug/L	0.38186	5.2102 ppb	0.38186	7.33%
QC value within limits for Ni 231.604 Recovery = 104.20%						
P 214.914†	280.2	147.73 ug/L	5.173	147.73 ppb	5.173	3.50%
QC value within limits for P 214.914 Recovery = 98.49%						
Pb 220.353†	72.9	8.7916 ug/L	0.92660	8.7916 ppb	0.92660	10.54%
QC value within limits for Pb 220.353 Recovery = 87.92%						
S 181.975 Axial†	68.4	88.382 ug/L	2.3245	88.382 ppb	2.3245	2.63%
QC value within limits for S 181.975 Axial Recovery = 88.38%						
Sb 206.836†	28.6	9.4964 ug/L	0.60195	9.4964 ppb	0.60195	6.34%
QC value within limits for Sb 206.836 Recovery = 94.96%						
Se 196.026†	50.3	28.405 ug/L	3.7613	28.405 ppb	3.7613	13.24%
QC value within limits for Se 196.026 Recovery = 94.68%						
Si 251.611†	3502.7	98.877 ug/L	0.5143	98.877 ppb	0.5143	0.52%
QC value within limits for Si 251.611 Recovery = 98.88%						
Sn 189.927†	53.8	9.3686 ug/L	0.67146	9.3686 ppb	0.67146	7.17%
QC value within limits for Sn 189.927 Recovery = 93.69%						
Sr 421.552†	843.0	5.1571 ug/L	0.03742	5.1571 ppb	0.03742	0.73%
QC value within limits for Sr 421.552 Recovery = 103.14%						
Ti 334.940†	3517.6	4.9937 ug/L	0.10521	4.9937 ppb	0.10521	2.11%
QC value within limits for Ti 334.940 Recovery = 99.87%						
Tl 190.801†	77.2	23.778 ug/L	1.4765	23.778 ppb	1.4765	6.21%
QC value within limits for Tl 190.801 Recovery = 118.89%						
U 409.014†	2429.2	57.702 ug/L	1.2957	57.702 ppb	1.2957	2.25%
QC value within limits for U 409.014 Recovery = 115.40%						
V 292.402†	766.5	4.7882 ug/L	0.27797	4.7882 ppb	0.27797	5.81%
QC value within limits for V 292.402 Recovery = 95.76%						
Zn 213.857†	856.8	7.5674 ug/L	0.14320	7.5674 ppb	0.14320	1.89%
QC value within limits for Zn 213.857 Recovery = 75.67%						
SiO2†	3665.8	222.11 ug/L	3.029	222.11 ppb	3.029	1.36%
QC value within limits for SiO2 Recovery = 104.28%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 1/29/2010 11:10:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4946.5	4946.5	91.5	%			11:12:35
1	Y RADIAL	5324.4	5324.4	91.13	%			11:12:35
1	Al 396.153Radial†	638674.2	698246.1	505240	ug/L	505240	ppb	11:12:30
1	Ca 317.933Radial†	274187.1	299745.4	474090	ug/L	474090	ppb	11:12:30
1	Fe 238.204 Radial†	19495.5	21304.4	188700	ug/L	188700	ppb	11:12:35
1	K 766.490 Radial†	2248.0	84.0	-144.30	ug/L	-144.30	ppb	11:12:35
1	Mg 279.077 IEC†	13370.9	14616.8	490790	ug/L	490790	ppb	11:12:35
1	Na 589.592 Radial†	-687.3	138.9	40.505	ug/L	40.505	ppb	11:12:35
1	Sr 421.552†	573.9	610.1	0.1932	ug/L	0.1932	ppb	11:12:35
1	Sc 361.383	835135.6	835135.6	86.771	%			11:13:02
1	Y 371.029	723480.3	723480.3	84.762	%			11:13:02
1	Ag 328.068†	-10868.6	-12827.0	3.6716	ug/L	3.6716	ppb	11:13:02
1	As 188.979†	-88.5	-68.0	17.537	ug/L	17.537	ppb	11:13:22
1	B 249.677†	826.3	1178.0	-5.6170	ug/L	-5.6170	ppb	11:13:02
1	Ba 233.527†	-528.3	-609.0	1.2048	ug/L	1.2048	ppb	11:13:22
1	Be 313.107†	-5231.3	-1020.9	-0.4034	ug/L	-0.4034	ppb	11:13:02
1	Cd 226.502†	1481.3	1908.6	0.6435	ug/L	0.6435	ppb	11:13:22
1	Co 228.616†	-18.7	54.8	-1.5910	ug/L	-1.5910	ppb	11:13:22
1	Cr 267.716†	-70.3	-177.3	1.8476	ug/L	1.8476	ppb	11:13:22
1	Cu 324.752†	6155.8	-1814.7	5.0642	ug/L	5.0642	ppb	11:13:02
1	Mn 257.610†	-442.7	-1184.0	-2.7093	ug/L	-2.7093	ppb	11:13:02
1	Mo 202.031†	-217.1	-272.3	2.5248	ug/L	2.5248	ppb	11:13:22
1	Ni 231.604†	217.9	158.0	3.7785	ug/L	3.7785	ppb	11:13:22
1	P 214.914†	168.9	-53.7	-54.440	ug/L	-54.440	ppb	11:13:22
1	Pb 220.353†	-748.9	-816.7	0.9567	ug/L	0.9567	ppb	11:13:22
1	S 181.975 Axial†	67.0	23.9	-63.809	ug/L	-63.809	ppb	11:13:22
1	Sb 206.836†	56.6	28.3	-1.2060	ug/L	-1.2060	ppb	11:13:22
1	Se 196.026†	-967.7	-1103.2	42.522	ug/L	42.522	ppb	11:13:22
1	Si 251.611†	442.9	-6.8	0.0259	ug/L	0.0259	ppb	11:13:22
1	Sn 189.927†	-363.0	-425.3	1.4137	ug/L	1.4137	ppb	11:13:22
1	Ti 334.940†	-16797.9	-18451.3	-2.8640	ug/L	-2.8640	ppb	11:13:02
1	Tl 190.801†	-79.8	-43.1	-13.490	ug/L	-13.490	ppb	11:13:22
1	U 409.014†	75.7	1630.3	17.234	ug/L	17.234	ppb	11:13:02
1	V 292.402†	1354.7	2945.1	-0.6703	ug/L	-0.6703	ppb	11:13:22
1	Zn 213.857†	3263.7	2733.7	6.0084	ug/L	6.0084	ppb	11:13:22
1	SiO2†	360.5	-107.1	-6.0110	ug/L	-6.0110	ppb	11:14:18
2	Sc Radial	5001.0	5001.0	92.5	%			11:12:45
2	Y RADIAL	5382.3	5382.3	92.12	%			11:12:45
2	Al 396.153Radial†	647562.5	700251.0	506690	ug/L	506690	ppb	11:12:40
2	Ca 317.933Radial†	276000.1	298440.4	472030	ug/L	472030	ppb	11:12:40
2	Fe 238.204 Radial†	19706.8	21300.7	188660	ug/L	188660	ppb	11:12:45
2	K 766.490 Radial†	2409.2	231.5	-118.51	ug/L	-118.51	ppb	11:12:45
2	Mg 279.077 IEC†	13503.5	14601.0	490250	ug/L	490250	ppb	11:12:45
2	Na 589.592 Radial†	-680.5	154.4	45.028	ug/L	45.028	ppb	11:12:45
2	Sr 421.552†	556.3	584.2	0.0504	ug/L	0.0504	ppb	11:12:45
2	Sc 361.383	834639.3	834639.3	86.719	%			11:13:27
2	Y 371.029	723221.8	723221.8	84.732	%			11:13:27
2	Ag 328.068†	-10779.6	-12731.8	4.0683	ug/L	4.0683	ppb	11:13:27
2	As 188.979†	-78.4	-56.3	22.080	ug/L	22.080	ppb	11:13:47
2	B 249.677†	775.4	1119.9	-6.8458	ug/L	-6.8458	ppb	11:13:27
2	Ba 233.527†	-550.3	-634.7	1.0112	ug/L	1.0112	ppb	11:13:47
2	Be 313.107†	-5330.3	-1138.7	-0.4423	ug/L	-0.4423	ppb	11:13:27
2	Cd 226.502†	1460.6	1885.6	0.4047	ug/L	0.4047	ppb	11:13:47
2	Co 228.616†	-33.5	37.7	-1.9390	ug/L	-1.9390	ppb	11:13:47
2	Cr 267.716†	-116.5	-230.7	1.2965	ug/L	1.2965	ppb	11:13:47
2	Cu 324.752†	6209.4	-1748.6	5.2406	ug/L	5.2406	ppb	11:13:27
2	Mn 257.610†	-706.9	-1488.9	-3.0181	ug/L	-3.0181	ppb	11:13:27
2	Mo 202.031†	-208.5	-262.5	3.1380	ug/L	3.1380	ppb	11:13:47
2	Ni 231.604†	194.9	131.7	3.1484	ug/L	3.1484	ppb	11:13:47

2	P 214.914†	168.8	-53.7	-54.071 ug/L	-54.071 ppb	11:13:47
2	Pb 220.353†	-746.7	-814.6	1.4821 ug/L	1.4821 ppb	11:13:47
2	S 181.975 Axial†	84.6	44.3	-37.644 ug/L	-37.644 ppb	11:13:47
2	Sb 206.836†	59.4	31.6	-0.2173 ug/L	-0.2173 ppb	11:13:47
2	Se 196.026†	-996.2	-1136.7	23.906 ug/L	23.906 ppb	11:13:47
2	Si 251.611†	469.2	23.8	0.8839 ug/L	0.8839 ppb	11:13:47
2	Sn 189.927†	-366.9	-430.0	0.2834 ug/L	0.2834 ppb	11:13:47
2	Ti 334.940†	-16594.4	-18228.1	-2.7790 ug/L	-2.7790 ppb	11:13:27
2	Tl 190.801†	-81.4	-45.1	-14.105 ug/L	-14.105 ppb	11:13:47
2	U 409.014†	102.2	1660.9	17.967 ug/L	17.967 ppb	11:13:27
2	V 292.402†	1389.9	2986.7	-0.4187 ug/L	-0.4187 ppb	11:13:47
2	Zn 213.857†	3228.5	2695.4	5.6741 ug/L	5.6741 ppb	11:13:47
2	SiO2†	444.5	-9.9	-0.1349 ug/L	-0.1349 ppb	11:14:23
3	Sc Radial	4916.8	4916.8	90.9 %		11:12:55
3	Y RADIAL	5307.2	5307.2	90.83 %		11:12:55
3	Al 396.153Radial†	644724.8	709118.4	513110 ug/L	513110 ppb	11:12:50
3	Ca 317.933Radial†	275738.9	303262.8	479650 ug/L	479650 ppb	11:12:50
3	Fe 238.204 Radial†	19403.3	21331.7	188940 ug/L	188940 ppb	11:12:55
3	K 766.490 Radial†	2285.9	140.4	-136.56 ug/L	-136.56 ppb	11:12:55
3	Mg 279.077 IEC†	13351.4	14683.7	493030 ug/L	493030 ppb	11:12:55
3	Na 589.592 Radial†	-668.9	154.5	45.076 ug/L	45.076 ppb	11:12:55
3	Sr 421.552†	612.1	655.9	0.4321 ug/L	0.4321 ppb	11:12:55
3	Sc 361.383	839207.4	839207.4	87.194 %		11:13:53
3	Y 371.029	726625.3	726625.3	85.131 %		11:13:53
3	Ag 328.068†	-10904.3	-12807.2	3.7537 ug/L	3.7537 ppb	11:13:53
3	As 188.979†	-90.3	-69.5	17.009 ug/L	17.009 ppb	11:14:13
3	B 249.677†	810.5	1155.2	-6.1429 ug/L	-6.1429 ppb	11:13:53
3	Ba 233.527†	-533.5	-612.0	1.1896 ug/L	1.1896 ppb	11:14:13
3	Be 313.107†	-5227.6	-987.4	-0.3924 ug/L	-0.3924 ppb	11:13:53
3	Cd 226.502†	1439.0	1851.7	0.0188 ug/L	0.0188 ppb	11:14:13
3	Co 228.616†	10.0	87.8	-0.9163 ug/L	-0.9163 ppb	11:14:13
3	Cr 267.716†	-84.6	-193.4	1.6868 ug/L	1.6868 ppb	11:14:13
3	Cu 324.752†	6111.8	-1899.5	4.8483 ug/L	4.8483 ppb	11:13:53
3	Mn 257.610†	-695.3	-1471.2	-3.0856 ug/L	-3.0856 ppb	11:13:53
3	Mo 202.031†	-200.1	-251.6	3.9597 ug/L	3.9597 ppb	11:14:13
3	Ni 231.604†	201.9	138.5	3.3104 ug/L	3.3104 ppb	11:14:13
3	P 214.914†	197.6	-21.7	-35.523 ug/L	-35.523 ppb	11:14:13
3	Pb 220.353†	-750.5	-814.3	3.0014 ug/L	3.0014 ppb	11:14:13
3	S 181.975 Axial†	88.2	47.9	-34.284 ug/L	-34.284 ppb	11:14:13
3	Sb 206.836†	65.9	38.7	1.9046 ug/L	1.9046 ppb	11:14:13
3	Se 196.026†	-976.4	-1107.8	41.275 ug/L	41.275 ppb	11:14:13
3	Si 251.611†	464.9	16.0	0.6540 ug/L	0.6540 ppb	11:14:13
3	Sn 189.927†	-369.2	-430.3	1.3929 ug/L	1.3929 ppb	11:14:13
3	Ti 334.940†	-16936.9	-18516.7	-2.3944 ug/L	-2.3944 ppb	11:13:53
3	Tl 190.801†	-86.5	-50.4	-15.744 ug/L	-15.744 ppb	11:14:13
3	U 409.014†	54.9	1606.0	16.630 ug/L	16.630 ppb	11:13:53
3	V 292.402†	1364.7	2949.1	-0.6205 ug/L	-0.6205 ppb	11:14:13
3	Zn 213.857†	3227.4	2673.9	5.4554 ug/L	5.4554 ppb	11:14:13
3	SiO2†	434.2	-24.5	-1.0421 ug/L	-1.0421 ppb	11:14:28

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	836327.4	86.895	%	0.2604				0.30%
Sc Radial	4954.8	91.6	%	0.79				0.86%
Y 371.029	724442.5	84.875	%	0.2220				0.26%
Y RADIAL	5338.0	91.36	%	0.674				0.74%
Ag 328.068†	-12788.7	3.8312	ug/L	0.20940	3.8312	ppb	0.20940	5.47%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	702538.5	508350	ug/L	4186.6	508350	ppb	4186.6	0.82%
QC value within limits for Al 396.153Radial Recovery = 101.67%								
As 188.979†	-64.6	18.875	ug/L	2.7878	18.875	ppb	2.7878	14.77%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1151.0	-6.2019	ug/L	0.61650	-6.2019	ppb	0.61650	9.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-618.6	1.1352	ug/L	0.10766	1.1352	ppb	0.10766	9.48%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1049.0	-0.4127	ug/L	0.02625	-0.4127	ppb	0.02625	6.36%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	300482.8	475260	ug/L	3945.2	475260	ppb	3945.2	0.83%

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   QC value within limits for Ca 317.933Radial  Recovery = 95.05%
Cd 226.502†            1882.0      0.3556 ug/L       0.31524      0.3556 ppb        0.31524  88.64%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              60.1     -1.4821 ug/L       0.51998     -1.4821 ppb        0.51998  35.08%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -200.5      1.6103 ug/L       0.28337      1.6103 ppb        0.28337  17.60%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -1820.9      5.0511 ug/L       0.19650      5.0511 ppb        0.19650   3.89%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    21312.3      188760 ug/L         149.9      188760 ppb          149.9   0.08%
   QC value within limits for Fe 238.204 Radial  Recovery = 94.38%
K 766.490 Radial†       151.9     -133.12 ug/L        13.230     -133.12 ppb         13.230   9.94%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       14633.8      491360 ug/L        1474.6      491360 ppb         1474.6   0.30%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.27%
Mn 257.610†           -1381.4     -2.9376 ug/L       0.20061     -2.9376 ppb        0.20061   6.83%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -262.1      3.2075 ug/L       0.72000      3.2075 ppb        0.72000  22.45%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      149.3      43.536 ug/L        2.6255      43.536 ppb         2.6255   6.03%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             142.7      3.4124 ug/L       0.32723      3.4124 ppb        0.32723   9.59%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -43.1     -48.011 ug/L       10.8165     -48.011 ppb        10.8165  22.53%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -815.2      1.8134 ug/L       1.06184      1.8134 ppb        1.06184  58.56%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         38.7     -45.246 ug/L       16.1636     -45.246 ppb        16.1636  35.72%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              32.9      0.1604 ug/L       1.58934      0.1604 ppb        1.58934 990.74%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           -1115.9      35.901 ug/L       10.4067      35.901 ppb        10.4067  28.99%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              11.0      0.5213 ug/L       0.44417      0.5213 ppb        0.44417  85.21%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -428.6      1.0300 ug/L       0.64664      1.0300 ppb        0.64664  62.78%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             616.7      0.2252 ug/L       0.19284      0.2252 ppb        0.19284  85.61%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -18398.7     -2.6792 ug/L       0.25021     -2.6792 ppb        0.25021   9.34%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -46.2     -14.446 ug/L        1.1652     -14.446 ppb         1.1652   8.07%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1632.4      17.277 ug/L        0.6694      17.277 ppb         0.6694   3.87%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2960.3     -0.5699 ug/L       0.13324     -0.5699 ppb        0.13324  23.38%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            2701.0      5.7126 ug/L       0.27849      5.7126 ppb        0.27849   4.88%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -47.2     -2.3960 ug/L       3.16338     -2.3960 ppb        3.16338 132.03%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 1/29/2010 11:16:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.5	4803.5	88.8	%			11:18:37
1	Y RADIAL	5196.1	5196.1	88.93	%			11:18:37
1	Al 396.153Radial†	647457.4	728918.5	527410	ug/L	527410	ppb	11:18:32
1	Ca 317.933Radial†	276772.3	311578.8	492810	ug/L	492810	ppb	11:18:32
1	Fe 238.204 Radial†	19419.0	21852.8	193570	ug/L	193570	ppb	11:18:37
1	K 766.490 Radial†	31452.3	33035.9	5453.1	ug/L	5453.1	ppb	11:18:32
1	Mg 279.077 IEC†	13287.3	14957.8	502240	ug/L	502240	ppb	11:18:37
1	Na 589.592 Radial†	17623.1	20730.8	6046.5	ug/L	6046.5	ppb	11:18:37
1	Sr 421.552†	75896.4	85428.4	519.10	ug/L	519.10	ppb	11:18:32
1	Sc 361.383	828547.6	828547.6	86.087	%			11:19:06
1	Y 371.029	716224.1	716224.1	83.912	%			11:19:06
1	Ag 328.068†	47183.8	54508.4	274.49	ug/L	274.49	ppb	11:19:06
1	As 188.979†	1044.4	1247.3	534.04	ug/L	534.04	ppb	11:19:26
1	B 249.677†	21786.8	25533.7	509.79	ug/L	509.79	ppb	11:19:06
1	Ba 233.527†	56090.3	65155.6	496.43	ug/L	496.43	ppb	11:19:06
1	Be 313.107†	615057.9	719472.9	243.26	ug/L	243.26	ppb	11:19:06
1	Cd 226.502†	39387.2	45954.4	464.94	ug/L	464.94	ppb	11:19:06
1	Co 228.616†	19006.7	22154.9	450.90	ug/L	450.90	ppb	11:19:26
1	Cr 267.716†	39600.6	45904.6	477.83	ug/L	477.83	ppb	11:19:06
1	Cu 324.752†	185265.5	206299.6	567.24	ug/L	567.24	ppb	11:19:06
1	Mn 257.610†	389181.0	451407.5	483.17	ug/L	483.17	ppb	11:19:06
1	Mo 202.031†	6209.9	7191.5	490.09	ug/L	490.09	ppb	11:19:26
1	Ni 231.604†	16091.1	18598.8	444.48	ug/L	444.48	ppb	11:19:26
1	P 214.914†	4326.4	4777.2	2421.2	ug/L	2421.2	ppb	11:19:26
1	Pb 220.353†	2659.6	3135.8	480.09	ug/L	480.09	ppb	11:19:26
1	S 181.975 Axial†	1880.3	2130.9	2656.6	ug/L	2656.6	ppb	11:19:26
1	Sb 206.836†	1532.5	1743.3	563.34	ug/L	563.34	ppb	11:19:26
1	Se 196.026†	3061.8	3568.7	2659.5	ug/L	2659.5	ppb	11:19:26
1	Si 251.611†	161605.2	187207.0	5285.7	ug/L	5285.7	ppb	11:19:06
1	Sn 189.927†	2062.9	2389.3	492.77	ug/L	492.77	ppb	11:19:26
1	Ti 334.940†	288476.8	336008.7	504.20	ug/L	504.20	ppb	11:19:06
1	Tl 190.801†	1268.6	1522.5	471.11	ug/L	471.11	ppb	11:19:26
1	U 409.014†	17078.5	21381.9	484.98	ug/L	484.98	ppb	11:19:06
1	V 292.402†	72994.5	86175.9	499.84	ug/L	499.84	ppb	11:19:06
1	Zn 213.857†	51416.2	58698.7	500.05	ug/L	500.05	ppb	11:19:06
1	SiO2†	161298.5	186845.4	11322	ug/L	11322	ppb	11:20:23
2	Sc Radial	4892.2	4892.2	90.5	%			11:18:48
2	Y RADIAL	5301.3	5301.3	90.73	%			11:18:48
2	Al 396.153Radial†	643306.1	711121.6	514540	ug/L	514540	ppb	11:18:43
2	Ca 317.933Radial†	275832.0	304893.1	482230	ug/L	482230	ppb	11:18:43
2	Fe 238.204 Radial†	19656.2	21718.8	192380	ug/L	192380	ppb	11:18:48
2	K 766.490 Radial†	31307.3	32234.0	5320.2	ug/L	5320.2	ppb	11:18:43
2	Mg 279.077 IEC†	13508.3	14931.0	501340	ug/L	501340	ppb	11:18:48
2	Na 589.592 Radial†	17910.8	20689.2	6034.4	ug/L	6034.4	ppb	11:18:48
2	Sr 421.552†	75222.2	83134.9	505.14	ug/L	505.14	ppb	11:18:43
2	Sc 361.383	842749.2	842749.2	87.562	%			11:19:32
2	Y 371.029	726865.8	726865.8	85.159	%			11:19:32
2	Ag 328.068†	47857.7	54354.4	273.63	ug/L	273.63	ppb	11:19:32
2	As 188.979†	1027.5	1207.5	518.29	ug/L	518.29	ppb	11:19:52
2	B 249.677†	22234.3	25618.3	511.81	ug/L	511.81	ppb	11:19:32
2	Ba 233.527†	56909.3	64993.0	495.17	ug/L	495.17	ppb	11:19:32
2	Be 313.107†	620600.7	713763.3	241.34	ug/L	241.34	ppb	11:19:32
2	Cd 226.502†	39758.2	45607.2	461.40	ug/L	461.40	ppb	11:19:32
2	Co 228.616†	18915.9	21679.2	441.16	ug/L	441.16	ppb	11:19:52
2	Cr 267.716†	40156.4	45764.2	476.35	ug/L	476.35	ppb	11:19:32
2	Cu 324.752†	189825.3	207880.5	571.45	ug/L	571.45	ppb	11:19:32
2	Mn 257.610†	394789.4	450194.3	481.78	ug/L	481.78	ppb	11:19:32
2	Mo 202.031†	6186.3	7043.0	480.18	ug/L	480.18	ppb	11:19:52
2	Ni 231.604†	16051.1	18238.1	435.86	ug/L	435.86	ppb	11:19:52

2	P 214.914†	4309.8	4673.6	2362.7 ug/L	2362.7 ppb	11:19:52
2	Pb 220.353†	2621.5	3040.3	465.79 ug/L	465.79 ppb	11:19:52
2	S 181.975 Axial†	1844.6	2053.4	2558.8 ug/L	2558.8 ppb	11:19:52
2	Sb 206.836†	1546.4	1729.2	558.82 ug/L	558.82 ppb	11:19:52
2	Se 196.026†	3045.7	3490.4	2611.2 ug/L	2611.2 ppb	11:19:52
2	Si 251.611†	164601.9	187466.0	5293.1 ug/L	5293.1 ppb	11:19:32
2	Sn 189.927†	2063.8	2350.0	484.33 ug/L	484.33 ppb	11:19:52
2	Ti 334.940†	293184.2	335737.9	502.47 ug/L	502.47 ppb	11:19:32
2	Tl 190.801†	1260.4	1488.3	460.62 ug/L	460.62 ppb	11:19:52
2	U 409.014†	17416.0	21433.0	486.34 ug/L	486.34 ppb	11:19:32
2	V 292.402†	73970.1	85861.2	498.00 ug/L	498.00 ppb	11:19:32
2	Zn 213.857†	52213.4	58602.7	499.36 ug/L	499.36 ppb	11:19:32
2	SiO2†	161403.4	183807.8	11138 ug/L	11138 ppb	11:20:29
3	Sc Radial	4891.1	4891.1	90.4 %		11:18:58
3	Y RADIAL	5264.9	5264.9	90.11 %		11:18:58
3	Al 396.153Radial†	636048.4	703253.2	508840 ug/L	508840 ppb	11:18:53
3	Ca 317.933Radial†	272486.5	301261.1	476490 ug/L	476490 ppb	11:18:53
3	Fe 238.204 Radial†	19676.2	21745.7	192620 ug/L	192620 ppb	11:18:58
3	K 766.490 Radial†	31039.7	31945.7	5273.1 ug/L	5273.1 ppb	11:18:53
3	Mg 279.077 IEC†	13466.3	14887.9	499890 ug/L	499890 ppb	11:18:58
3	Na 589.592 Radial†	17890.2	20670.9	6029.1 ug/L	6029.1 ppb	11:18:58
3	Sr 421.552†	74236.1	82062.8	498.63 ug/L	498.63 ppb	11:18:53
3	Sc 361.383	829439.0	829439.0	86.179 %		11:19:58
3	Y 371.029	716144.6	716144.6	83.903 %		11:19:58
3	Ag 328.068†	47265.1	54543.9	274.54 ug/L	274.54 ppb	11:19:58
3	As 188.979†	1028.1	1227.0	525.96 ug/L	525.96 ppb	11:20:18
3	B 249.677†	21909.5	25648.9	512.41 ug/L	512.41 ppb	11:19:58
3	Ba 233.527†	56200.4	65213.4	496.84 ug/L	496.84 ppb	11:19:58
3	Be 313.107†	613745.3	717182.0	242.49 ug/L	242.49 ppb	11:19:58
3	Cd 226.502†	39138.3	45616.4	461.48 ug/L	461.48 ppb	11:19:58
3	Co 228.616†	18833.1	21929.8	446.30 ug/L	446.30 ppb	11:20:18
3	Cr 267.716†	39576.2	45826.9	477.01 ug/L	477.01 ppb	11:19:58
3	Cu 324.752†	186621.3	207641.5	570.81 ug/L	570.81 ppb	11:19:58
3	Mn 257.610†	389567.6	451370.3	483.13 ug/L	483.13 ppb	11:19:58
3	Mo 202.031†	6160.5	7126.4	485.57 ug/L	485.57 ppb	11:20:18
3	Ni 231.604†	15968.2	18436.0	440.59 ug/L	440.59 ppb	11:20:18
3	P 214.914†	4315.1	4758.8	2406.7 ug/L	2406.7 ppb	11:20:18
3	Pb 220.353†	2599.1	3062.3	467.09 ug/L	467.09 ppb	11:20:18
3	S 181.975 Axial†	1832.2	2072.8	2585.0 ug/L	2585.0 ppb	11:20:18
3	Sb 206.836†	1511.8	1717.3	555.42 ug/L	555.42 ppb	11:20:18
3	Se 196.026†	3027.7	3525.4	2631.1 ug/L	2631.1 ppb	11:20:18
3	Si 251.611†	162259.7	187764.7	5301.5 ug/L	5301.5 ppb	11:19:58
3	Sn 189.927†	2059.0	2382.2	489.04 ug/L	489.04 ppb	11:20:18
3	Ti 334.940†	289129.4	336405.9	502.77 ug/L	502.77 ppb	11:19:58
3	Tl 190.801†	1267.6	1519.8	470.29 ug/L	470.29 ppb	11:20:18
3	U 409.014†	17247.0	21556.0	489.23 ug/L	489.23 ppb	11:19:58
3	V 292.402†	73014.1	86107.6	499.48 ug/L	499.48 ppb	11:19:58
3	Zn 213.857†	51592.1	58838.7	501.41 ug/L	501.41 ppb	11:19:58
3	SiO2†	163418.0	189103.5	11460 ug/L	11460 ppb	11:20:34

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	833578.6	86.609	%	0.8265				0.95%
Sc Radial	4862.3	89.9	%	0.94				1.05%
Y 371.029	719744.8	84.325	%	0.7225				0.86%
Y RADIAL	5254.1	89.92	%	0.914				1.02%
Ag 328.068†	54468.9	274.22	ug/L	0.513	274.22	ppb	0.513	0.19%
QC value within limits for Ag 328.068 Recovery = 109.69%								
Al 396.153Radial†	714431.1	516930	ug/L	9514.2	516930	ppb	9514.2	1.84%
QC value within limits for Al 396.153Radial Recovery = 103.39%								
As 188.979†	1227.3	526.10	ug/L	7.880	526.10	ppb	7.880	1.50%
QC value within limits for As 188.979 Recovery = 105.22%								
B 249.677†	25600.3	511.34	ug/L	1.371	511.34	ppb	1.371	0.27%
QC value within limits for B 249.677 Recovery = 102.27%								
Ba 233.527†	65120.6	496.15	ug/L	0.869	496.15	ppb	0.869	0.18%
QC value within limits for Ba 233.527 Recovery = 99.23%								
Be 313.107†	716806.1	242.36	ug/L	0.968	242.36	ppb	0.968	0.40%
QC value within limits for Be 313.107 Recovery = 96.94%								
Ca 317.933Radial†	305911.0	483840	ug/L	8277.7	483840	ppb	8277.7	1.71%

```
   QC value within limits for Ca 317.933Radial  Recovery = 96.77%
Cd 226.502†            45726.0      462.61 ug/L        2.024      462.61 ppb          2.024   0.44%
   QC value within limits for Cd 226.502  Recovery = 92.52%
Co 228.616†            21921.3      446.12 ug/L        4.874      446.12 ppb          4.874   1.09%
   QC value within limits for Co 228.616  Recovery = 89.22%
Cr 267.716†            45831.9      477.06 ug/L        0.739      477.06 ppb          0.739   0.15%
   QC value within limits for Cr 267.716  Recovery = 95.41%
Cu 324.752†           207273.9      569.83 ug/L        2.268      569.83 ppb          2.268   0.40%
   QC value within limits for Cu 324.752  Recovery = 113.97%
Fe 238.204 Radial†     21772.4      192850 ug/L        627.8      192850 ppb          627.8   0.33%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.43%
K 766.490 Radial†      32405.2      5348.8 ug/L        93.35      5348.8 ppb          93.35   1.75%
   QC value within limits for K 766.490 Radial  Recovery = 106.98%
Mg 279.077 IEC†        14925.6      501160 ug/L       1183.5      501160 ppb         1183.5   0.24%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.23%
Mn 257.610†           450990.7      482.69 ug/L        0.788      482.69 ppb          0.788   0.16%
   QC value within limits for Mn 257.610  Recovery = 96.54%
Mo 202.031†             7120.3      485.28 ug/L        4.960      485.28 ppb          4.960   1.02%
   QC value within limits for Mo 202.031  Recovery = 97.06%
Na 589.592 Radial†     20697.0      6036.7 ug/L         8.96      6036.7 ppb           8.96   0.15%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = 120.73%
Ni 231.604†            18424.3      440.31 ug/L        4.316      440.31 ppb          4.316   0.98%
   QC value within limits for Ni 231.604  Recovery = 88.06%
P 214.914†              4736.6      2396.9 ug/L        30.48      2396.9 ppb          30.48   1.27%
   QC value within limits for P 214.914  Recovery = 95.87%
Pb 220.353†             3079.5      470.99 ug/L        7.912      470.99 ppb          7.912   1.68%
   QC value within limits for Pb 220.353  Recovery = 94.20%
S 181.975 Axial†        2085.7      2600.1 ug/L        50.62      2600.1 ppb          50.62   1.95%
   QC value within limits for S 181.975 Axial  Recovery = 104.00%
Sb 206.836†             1729.9      559.19 ug/L        3.976      559.19 ppb          3.976   0.71%
   QC value within limits for Sb 206.836  Recovery = 111.84%
Se 196.026†             3528.2      2633.9 ug/L        24.29      2633.9 ppb          24.29   0.92%
   QC value within limits for Se 196.026  Recovery = 105.36%
Si 251.611†           187479.2      5293.4 ug/L         7.91      5293.4 ppb           7.91   0.15%
   QC value within limits for Si 251.611  Recovery = 105.87%
Sn 189.927†             2373.9      488.71 ug/L        4.231      488.71 ppb          4.231   0.87%
   QC value within limits for Sn 189.927  Recovery = 97.74%
Sr 421.552†            83542.1      507.62 ug/L       10.460      507.62 ppb         10.460   2.06%
   QC value within limits for Sr 421.552  Recovery = 101.52%
Ti 334.940†           336050.9      503.15 ug/L        0.925      503.15 ppb          0.925   0.18%
   QC value within limits for Ti 334.940  Recovery = 100.63%
Tl 190.801†             1510.2      467.34 ug/L        5.831      467.34 ppb          5.831   1.25%
   QC value within limits for Tl 190.801  Recovery = 93.47%
U 409.014†             21456.9      486.85 ug/L        2.170      486.85 ppb          2.170   0.45%
   QC value within limits for U 409.014  Recovery = 97.37%
V 292.402†             86048.2      499.11 ug/L        0.977      499.11 ppb          0.977   0.20%
   QC value within limits for V 292.402  Recovery = 99.82%
Zn 213.857†            58713.4      500.28 ug/L        1.042      500.28 ppb          1.042   0.21%
   QC value within limits for Zn 213.857  Recovery = 100.06%
SiO2†                 186585.5       11307 ug/L        161.1       11307 ppb          161.1   1.43%
   QC value within limits for SiO2  Recovery = 105.72%
QC Failed.  Continue with analysis.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 1/29/2010 11:22:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	4803.9	4803.9	88.8	%			11:24:42
1	Y RADIAL	5198.3	5198.3	88.97	%			11:24:42
1	Al 396.153Radial†	621455.7	699592.3	506220	ug/L	506220	ppb	11:24:37
1	Ca 317.933Radial†	265596.6	298974.2	472870	ug/L	472870	ppb	11:24:37
1	Fe 238.204 Radial†	44452.8	50032.5	443140	ug/L	443140	ppb	11:24:42
1	K 766.490 Radial†	2441.6	374.9	-306.75	ug/L	-306.75	ppb	11:24:42
1	Mg 279.077 IEC†	13002.1	14635.6	491150	ug/L	491150	ppb	11:24:42
1	Na 589.592 Radial†	1657620.7	1866934.2	544530	ug/L	544530	ppb	11:24:37
1	Sr 421.552†	792.2	874.4	1.8202	ug/L	1.8202	ppb	11:24:42
1	Sc 361.383	814279.5	814279.5	84.604	%			11:25:10
1	Y 371.029	705997.3	705997.3	82.714	%			11:25:10
1	Ag 328.068†	-25495.4	-30436.3	5.1721	ug/L	5.1721	ppb	11:25:10
1	As 188.979†	-196.8	-198.6	26.418	ug/L	26.418	ppb	11:25:30
1	B 249.677†	2028.9	2623.8	-16.235	ug/L	-16.235	ppb	11:25:10
1	Ba 233.527†	-1481.7	-1751.5	0.3944	ug/L	0.3944	ppb	11:25:30
1	Be 313.107†	-12168.1	-9374.4	-3.1973	ug/L	-3.1973	ppb	11:25:10
1	Cd 226.502†	3783.2	4673.1	6.1157	ug/L	6.1157	ppb	11:25:30
1	Co 228.616†	228.4	346.3	0.6342	ug/L	0.6342	ppb	11:25:30
1	Cr 267.716†	118.8	44.1	3.7944	ug/L	3.7944	ppb	11:25:30
1	Cu 324.752†	2751.6	-5656.6	0.7509	ug/L	0.7509	ppb	11:25:10
1	Mn 257.610†	-25860.3	-31240.1	-9.8701	ug/L	-9.8701	ppb	11:25:10
1	Mo 202.031†	-469.9	-577.4	2.3537	ug/L	2.3537	ppb	11:25:30
1	Ni 231.604†	276.0	233.2	5.5725	ug/L	5.5725	ppb	11:25:30
1	P 214.914†	621.5	486.2	31.368	ug/L	31.368	ppb	11:25:30
1	Pb 220.353†	-515.7	-563.1	7.1699	ug/L	7.1699	ppb	11:25:30
1	S 181.975 Axial†	108.5	75.0	2.0812	ug/L	2.0812	ppb	11:25:30
1	Sb 206.836†	55.9	29.1	4.9324	ug/L	4.9324	ppb	11:25:30
1	Se 196.026†	-2364.7	-2783.0	-50.118	ug/L	-50.118	ppb	11:25:30
1	Si 251.611†	-441.2	-1038.7	-28.896	ug/L	-28.896	ppb	11:25:30
1	Sn 189.927†	-384.0	-460.8	-0.6525	ug/L	-0.6525	ppb	11:25:30
1	Ti 334.940†	-11706.8	-12929.5	-1.0722	ug/L	-1.0722	ppb	11:25:10
1	Tl 190.801†	-104.7	-74.9	-23.428	ug/L	-23.428	ppb	11:25:30
1	U 409.014†	476180.8	564377.7	13361	ug/L	13361	ppb	11:25:10
1	V 292.402†	3254.1	5230.2	1.1468	ug/L	1.1468	ppb	11:25:10
1	Zn 213.857†	6242.0	6350.5	13.517	ug/L	13.517	ppb	11:25:30
1	SiO2†	-526.3	-1144.6	-68.412	ug/L	-68.412	ppb	11:26:27
2	Sc Radial	4821.1	4821.1	89.1	%			11:24:52
2	Y RADIAL	5228.4	5228.4	89.48	%			11:24:52
2	Al 396.153Radial†	617416.7	692561.2	501130	ug/L	501130	ppb	11:24:47
2	Ca 317.933Radial†	264404.0	296567.9	469060	ug/L	469060	ppb	11:24:47
2	Fe 238.204 Radial†	44683.3	50112.3	443850	ug/L	443850	ppb	11:24:52
2	K 766.490 Radial†	2355.5	268.4	-320.76	ug/L	-320.76	ppb	11:24:52
2	Mg 279.077 IEC†	13093.6	14686.0	492840	ug/L	492840	ppb	11:24:52
2	Na 589.592 Radial†	1641329.6	1841990.8	537250	ug/L	537250	ppb	11:24:47
2	Sr 421.552†	802.4	882.7	1.8994	ug/L	1.8994	ppb	11:24:52
2	Sc 361.383	818120.8	818120.8	85.003	%			11:25:36
2	Y 371.029	709403.5	709403.5	83.113	%			11:25:36
2	Ag 328.068†	-25462.5	-30256.1	6.1359	ug/L	6.1359	ppb	11:25:36
2	As 188.979†	-197.7	-198.5	26.576	ug/L	26.576	ppb	11:25:56
2	B 249.677†	1902.5	2463.8	-19.750	ug/L	-19.750	ppb	11:25:36
2	Ba 233.527†	-1503.4	-1768.9	0.2856	ug/L	0.2856	ppb	11:25:56
2	Be 313.107†	-12369.8	-9544.3	-3.2557	ug/L	-3.2557	ppb	11:25:36
2	Cd 226.502†	3729.1	4588.4	5.1575	ug/L	5.1575	ppb	11:25:56
2	Co 228.616†	215.9	330.4	0.3039	ug/L	0.3039	ppb	11:25:56
2	Cr 267.716†	15.5	-78.1	2.5309	ug/L	2.5309	ppb	11:25:56
2	Cu 324.752†	2972.0	-5412.6	1.4244	ug/L	1.4244	ppb	11:25:36
2	Mn 257.610†	-26420.4	-31755.5	-10.423	ug/L	-10.423	ppb	11:25:36
2	Mo 202.031†	-443.5	-543.8	4.5568	ug/L	4.5568	ppb	11:25:56
2	Ni 231.604†	266.6	220.6	5.2721	ug/L	5.2721	ppb	11:25:56

2	P 214.914†	607.4	466.1	18.657 ug/L	18.657 ppb	11:25:56
2	Pb 220.353†	-524.9	-571.1	4.9871 ug/L	4.9871 ppb	11:25:56
2	S 181.975 Axial†	99.3	63.5	-11.797 ug/L	-11.797 ppb	11:25:56
2	Sb 206.836†	50.7	22.7	3.0616 ug/L	3.0616 ppb	11:25:56
2	Se 196.026†	-2361.5	-2766.1	-38.703 ug/L	-38.703 ppb	11:25:56
2	Si 251.611†	-419.1	-1010.2	-28.118 ug/L	-28.118 ppb	11:25:56
2	Sn 189.927†	-390.3	-466.1	-2.1397 ug/L	-2.1397 ppb	11:25:56
2	Ti 334.940†	-12089.2	-13314.4	-2.2878 ug/L	-2.2878 ppb	11:25:36
2	Tl 190.801†	-111.4	-82.2	-25.667 ug/L	-25.667 ppb	11:25:56
2	U 409.014†	479903.4	566114.4	13402 ug/L	13402 ppb	11:25:36
2	V 292.402†	3271.3	5232.3	1.2006 ug/L	1.2006 ppb	11:25:36
2	Zn 213.857†	6210.3	6278.4	12.808 ug/L	12.808 ppb	11:25:56
2	SiO2†	-480.1	-1087.4	-65.000 ug/L	-65.000 ppb	11:26:32
3	Sc Radial	4770.7	4770.7	88.2 %		11:25:03
3	Y RADIAL	5150.5	5150.5	88.15 %		11:25:03
3	Al 396.153Radial†	627332.9	711120.3	514560 ug/L	514560 ppb	11:24:58
3	Ca 317.933Radial†	267361.2	303054.0	479320 ug/L	479320 ppb	11:24:58
3	Fe 238.204 Radial†	44115.8	49998.6	442840 ug/L	442840 ppb	11:25:03
3	K 766.490 Radial†	2331.9	269.6	-329.50 ug/L	-329.50 ppb	11:25:03
3	Mg 279.077 IEC†	12941.6	14668.9	492270 ug/L	492270 ppb	11:25:03
3	Na 589.592 Radial†	1666937.0	1890473.5	551390 ug/L	551390 ppb	11:24:58
3	Sr 421.552†	781.7	868.7	1.7369 ug/L	1.7369 ppb	11:25:03
3	Sc 361.383	804967.7	804967.7	83.637 %		11:26:01
3	Y 371.029	697217.6	697217.6	81.685 %		11:26:01
3	Ag 328.068†	-25255.6	-30498.2	4.6943 ug/L	4.6943 ppb	11:26:01
3	As 188.979†	-179.5	-180.5	33.360 ug/L	33.360 ppb	11:26:22
3	B 249.677†	2050.2	2677.0	-15.057 ug/L	-15.057 ppb	11:26:01
3	Ba 233.527†	-1596.6	-1909.2	-0.7986 ug/L	-0.7986 ppb	11:26:22
3	Be 313.107†	-12184.6	-9560.6	-3.2642 ug/L	-3.2642 ppb	11:26:01
3	Cd 226.502†	3791.6	4734.8	6.8085 ug/L	6.8085 ppb	11:26:22
3	Co 228.616†	223.8	343.9	0.5908 ug/L	0.5908 ppb	11:26:22
3	Cr 267.716†	6.4	-88.6	2.3966 ug/L	2.3966 ppb	11:26:22
3	Cu 324.752†	2755.7	-5614.1	0.8175 ug/L	0.8175 ppb	11:26:01
3	Mn 257.610†	-25554.4	-31227.9	-9.9324 ug/L	-9.9324 ppb	11:26:01
3	Mo 202.031†	-478.6	-594.3	1.3045 ug/L	1.3045 ppb	11:26:22
3	Ni 231.604†	256.6	213.8	5.1086 ug/L	5.1086 ppb	11:26:22
3	P 214.914†	613.8	485.5	33.260 ug/L	33.260 ppb	11:26:22
3	Pb 220.353†	-495.2	-545.6	11.196 ug/L	11.196 ppb	11:26:22
3	S 181.975 Axial†	110.9	79.3	6.1037 ug/L	6.1037 ppb	11:26:22
3	Sb 206.836†	60.5	35.5	6.6517 ug/L	6.6517 ppb	11:26:22
3	Se 196.026†	-2339.2	-2784.9	-51.655 ug/L	-51.655 ppb	11:26:22
3	Si 251.611†	-395.2	-989.8	-27.499 ug/L	-27.499 ppb	11:26:22
3	Sn 189.927†	-395.0	-479.3	-2.8793 ug/L	-2.8793 ppb	11:26:22
3	Ti 334.940†	-12664.7	-14234.9	-2.1861 ug/L	-2.1861 ppb	11:26:01
3	Tl 190.801†	-94.3	-63.9	-20.065 ug/L	-20.065 ppb	11:26:22
3	U 409.014†	472779.7	566822.0	13419 ug/L	13419 ppb	11:26:01
3	V 292.402†	3245.9	5264.8	1.5159 ug/L	1.5159 ppb	11:26:01
3	Zn 213.857†	6206.4	6393.2	13.929 ug/L	13.929 ppb	11:26:22
3	SiO2†	-471.8	-1086.7	-64.870 ug/L	-64.870 ppb	11:26:37

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	812456.0	84.415	%	0.7027				0.83%
Sc Radial	4798.6	88.7	%	0.47				0.53%
Y 371.029	704206.1	82.504	%	0.7366				0.89%
Y RADIAL	5192.4	88.87	%	0.672				0.76%
Ag 328.068†	-30396.9	5.3341	ug/L	0.73432	5.3341	ppb	0.73432	13.77%
Al 396.153Radial†	701091.3	507300	ug/L	6780.0	507300	ppb	6780.0	1.34%
QC value within limits for Al 396.153Radial Recovery = 101.46%								
As 188.979†	-192.5	28.785	ug/L	3.9632	28.785	ppb	3.9632	13.77%
B 249.677†	2588.2	-17.014	ug/L	2.4414	-17.014	ppb	2.4414	14.35%
Ba 233.527†	-1809.9	-0.0395	ug/L	0.65962	-0.0395	ppb	0.65962	>999.9%
Be 313.107†	-9493.1	-3.2390	ug/L	0.03642	-3.2390	ppb	0.03642	1.12%
Ca 317.933Radial†	299532.0	473750	ug/L	5186.0	473750	ppb	5186.0	1.09%
QC value within limits for Ca 317.933Radial Recovery = 94.75%								
Cd 226.502†	4665.4	6.0272	ug/L	0.82904	6.0272	ppb	0.82904	13.75%
Co 228.616†	340.2	0.5096	ug/L	0.17946	0.5096	ppb	0.17946	35.21%
Cr 267.716†	-40.9	2.9073	ug/L	0.77116	2.9073	ppb	0.77116	26.53%
Cu 324.752†	-5561.1	0.9976	ug/L	0.37111	0.9976	ppb	0.37111	37.20%

Fe 238.204 Radial†	50047.8	443280	ug/L	516.8	443280	ppb	516.8	0.12%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 88.66%								
K 766.490 Radial†	304.3	-319.00	ug/L	11.478	-319.00	ppb	11.478	3.60%
Mg 279.077 IEC†	14663.5	492090	ug/L	859.8	492090	ppb	859.8	0.17%
QC value within limits for Mg 279.077 IEC Recovery = 98.42%								
Mn 257.610†	-31407.9	-10.075	ug/L	0.3027	-10.075	ppb	0.3027	3.00%
Mo 202.031†	-571.9	2.7383	ug/L	1.65994	2.7383	ppb	1.65994	60.62%
Na 589.592 Radial†	1866466.2	544390	ug/L	7071.4	544390	ppb	7071.4	1.30%
QC value within limits for Na 589.592 Radial Recovery = 108.88%								
Ni 231.604†	222.6	5.3178	ug/L	0.23530	5.3178	ppb	0.23530	4.42%
P 214.914†	479.3	27.762	ug/L	7.9416	27.762	ppb	7.9416	28.61%
Pb 220.353†	-560.0	7.7845	ug/L	3.15001	7.7845	ppb	3.15001	40.47%
S 181.975 Axial†	72.6	-1.2041	ug/L	9.39166	-1.2041	ppb	9.39166	780.00%
Sb 206.836†	29.1	4.8819	ug/L	1.79556	4.8819	ppb	1.79556	36.78%
Se 196.026†	-2778.0	-46.825	ug/L	7.0757	-46.825	ppb	7.0757	15.11%
Si 251.611†	-1012.9	-28.171	ug/L	0.6998	-28.171	ppb	0.6998	2.48%
Sn 189.927†	-468.7	-1.8905	ug/L	1.13411	-1.8905	ppb	1.13411	59.99%
Sr 421.552†	875.3	1.8188	ug/L	0.08127	1.8188	ppb	0.08127	4.47%
Ti 334.940†	-13492.9	-1.8487	ug/L	0.67441	-1.8487	ppb	0.67441	36.48%
Tl 190.801†	-73.7	-23.053	ug/L	2.8197	-23.053	ppb	2.8197	12.23%
U 409.014†	565771.3	13394	ug/L	29.9	13394	ppb	29.9	0.22%
QC value less than the lower limit for U 409.014 Recovery = 89.29%								
V 292.402†	5242.4	1.2877	ug/L	0.19938	1.2877	ppb	0.19938	15.48%
Zn 213.857†	6340.7	13.418	ug/L	0.5668	13.418	ppb	0.5668	4.22%
SiO2†	-1106.2	-66.094	ug/L	2.0086	-66.094	ppb	2.0086	3.04%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 1/29/2010 11:28:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5243.2	5243.2	97.0	%			11:30:46
1	Y RADIAL	5626.5	5626.5	96.30	%			11:30:46
1	Al 396.153Radial†	610.5	626.6	-1.0845	ug/L	-1.0845	ppb	11:30:46
1	Ca 317.933Radial†	33.9	17.4	27.507	ug/L	27.507	ppb	11:31:06
1	Fe 238.204 Radial†	-20.8	-31.1	-1.0861	ug/L	-1.0861	ppb	11:31:06
1	K 766.490 Radial†	1734439.7	1786538.1	303970	ug/L	303970	ppb	11:30:41
1	Mg 279.077 IEC†	-4.7	-6.2	-109.34	ug/L	-109.34	ppb	11:31:06
1	Na 589.592 Radial†	-439.2	437.3	127.53	ug/L	127.53	ppb	11:30:46
1	Sr 421.552†	1563430.2	1612514.3	9867.8	ug/L	9867.8	ppb	11:30:41
1	Sc 361.383	938786.4	938786.4	97.540	%			11:32:23
1	Y 371.029	812557.5	812557.5	95.198	%			11:32:23
1	Ag 328.068†	-8586.4	-9104.2	3.2491	ug/L	3.2491	ppb	11:32:28
1	As 188.979†	23314.0	23936.0	9381.6	ug/L	9381.6	ppb	11:32:28
1	B 249.677†	225719.9	231637.5	4895.5	ug/L	4895.5	ppb	11:32:23
1	Ba 233.527†	1767206.2	1811769.1	13631	ug/L	13631	ppb	11:32:23
1	Be 313.107†	8059802.8	8268051.8	2804.9	ug/L	2804.9	ppb	11:32:16
1	Cd 226.502†	868262.5	890358.5	9394.2	ug/L	9394.2	ppb	11:32:23
1	Co 228.616†	436680.5	447768.4	9165.1	ug/L	9165.1	ppb	11:32:28
1	Cr 267.716†	2195739.3	2251012.2	23235	ug/L	23235	ppb	11:32:23
1	Cu 324.752†	7288934.2	7463827.5	20162	ug/L	20162	ppb	11:32:16
1	Mn 257.610†	8430164.6	8642071.0	9277.4	ug/L	9277.4	ppb	11:32:16
1	Mo 202.031†	140134.1	143645.7	9371.9	ug/L	9371.9	ppb	11:32:28
1	Ni 231.604†	387285.7	396958.7	9486.9	ug/L	9486.9	ppb	11:32:23
1	P 214.914†	32229.4	32793.8	13611	ug/L	13611	ppb	11:32:28
1	Pb 220.353†	193893.0	198828.8	23837	ug/L	23837	ppb	11:32:28
1	S 181.975 Axial†	39058.5	39990.1	51711	ug/L	51711	ppb	11:32:28
1	Sb 206.836†	32243.7	33019.9	10891	ug/L	10891	ppb	11:32:28
1	Se 196.026†	17567.9	18022.9	10050	ug/L	10050	ppb	11:32:28
1	Si 251.611†	1617304.0	1657569.7	46736	ug/L	46736	ppb	11:32:23
1	Sn 189.927†	56457.3	57874.0	10043	ug/L	10043	ppb	11:32:28
1	Ti 334.940†	6598601.9	6765904.1	9647.6	ug/L	9647.6	ppb	11:32:16
1	Tl 190.801†	30375.6	31190.4	9648.4	ug/L	9648.4	ppb	11:32:28
1	U 409.014†	472.1	2027.1	-3.7633	ug/L	-3.7633	ppb	11:32:28
1	V 292.402†	1608051.4	1649984.9	9905.6	ug/L	9905.6	ppb	11:32:23
1	Zn 213.857†	1484854.2	1521269.7	13451	ug/L	13451	ppb	11:32:23
1	SiO2†	1599004.6	1638803.5	99165	ug/L	99165	ppb	11:33:16
2	Sc Radial	5281.4	5281.4	97.7	%			11:31:16
2	Y RADIAL	5622.8	5622.8	96.23	%			11:31:16
2	Al 396.153Radial†	597.5	608.8	-14.147	ug/L	-14.147	ppb	11:31:16
2	Ca 317.933Radial†	30.2	13.4	21.124	ug/L	21.124	ppb	11:31:36
2	Fe 238.204 Radial†	-21.9	-32.0	-8.7754	ug/L	-8.7754	ppb	11:31:36
2	K 766.490 Radial†	1734090.1	1773263.8	301710	ug/L	301710	ppb	11:31:11
2	Mg 279.077 IEC†	-4.7	-6.1	-107.89	ug/L	-107.89	ppb	11:31:36
2	Na 589.592 Radial†	-506.1	372.1	108.53	ug/L	108.53	ppb	11:31:16
2	Sr 421.552†	1561466.0	1598860.1	9784.2	ug/L	9784.2	ppb	11:31:11
2	Sc 361.383	932677.1	932677.1	96.906	%			11:32:43
2	Y 371.029	805744.3	805744.3	94.400	%			11:32:43
2	Ag 328.068†	-8653.1	-9230.8	2.7639	ug/L	2.7639	ppb	11:32:48
2	As 188.979†	23232.9	24008.8	9410.4	ug/L	9410.4	ppb	11:32:48
2	B 249.677†	224630.0	232028.5	4903.8	ug/L	4903.8	ppb	11:32:43
2	Ba 233.527†	1760925.7	1817155.6	13671	ug/L	13671	ppb	11:32:43
2	Be 313.107†	8045322.0	8307233.9	2818.2	ug/L	2818.2	ppb	11:32:36
2	Cd 226.502†	866169.0	894029.0	9432.9	ug/L	9432.9	ppb	11:32:43
2	Co 228.616†	434703.4	448660.7	9183.3	ug/L	9183.3	ppb	11:32:48
2	Cr 267.716†	2185826.6	2255528.4	23281	ug/L	23281	ppb	11:32:43
2	Cu 324.752†	7258316.1	7481180.4	20209	ug/L	20209	ppb	11:32:36
2	Mn 257.610†	8434723.4	8703387.9	9343.2	ug/L	9343.2	ppb	11:32:36
2	Mo 202.031†	139276.1	143701.4	9375.5	ug/L	9375.5	ppb	11:32:48
2	Ni 231.604†	385990.0	398222.5	9517.2	ug/L	9517.2	ppb	11:32:43

2	P 214.914†	32203.7	32983.7	13703	ug/L	13703 ppb	11:32:48
2	Pb 220.353†	193103.4	199316.0	23895	ug/L	23895 ppb	11:32:48
2	S 181.975 Axial†	38777.2	39962.1	51675	ug/L	51675 ppb	11:32:48
2	Sb 206.836†	32021.7	33007.3	10887	ug/L	10887 ppb	11:32:48
2	Se 196.026†	17451.4	18020.7	10049	ug/L	10049 ppb	11:32:48
2	Si 251.611†	1610430.6	1661337.8	46843	ug/L	46843 ppb	11:32:43
2	Sn 189.927†	56298.7	58089.5	10080	ug/L	10080 ppb	11:32:48
2	Ti 334.940†	6590447.8	6801802.3	9698.9	ug/L	9698.9 ppb	11:32:36
2	Tl 190.801†	30228.8	31242.9	9665.2	ug/L	9665.2 ppb	11:32:48
2	U 409.014†	227.4	1777.7	-9.7920	ug/L	-9.7920 ppb	11:32:48
2	V 292.402†	1598229.0	1650647.6	9909.5	ug/L	9909.5 ppb	11:32:43
2	Zn 213.857†	1481054.4	1527320.1	13505	ug/L	13505 ppb	11:32:43
2	SiO2†	1608883.9	1659736.4	100430	ug/L	100430 ppb	11:33:23
3	Sc Radial	5231.1	5231.1	96.7	%		11:31:47
3	Y RADIAL	5582.0	5582.0	95.54	%		11:31:47
3	Al 396.153Radial†	569.2	585.4	-29.293	ug/L	-29.293 ppb	11:31:47
3	Ca 317.933Radial†	33.0	16.6	26.225	ug/L	26.225 ppb	11:32:07
3	Fe 238.204 Radial†	-22.1	-32.4	-13.447	ug/L	-13.447 ppb	11:32:07
3	K 766.490 Radial†	1745104.3	1801726.8	306550	ug/L	306550 ppb	11:31:42
3	Mg 279.077 IEC†	-3.2	-4.6	-57.400	ug/L	-57.400 ppb	11:32:07
3	Na 589.592 Radial†	-546.8	325.0	94.793	ug/L	94.793 ppb	11:31:47
3	Sr 421.552†	1577809.4	1631132.6	9981.7	ug/L	9981.7 ppb	11:31:42
3	Sc 361.383	931573.4	931573.4	96.791	%		11:33:03
3	Y 371.029	805340.8	805340.8	94.353	%		11:33:03
3	Ag 328.068†	-8472.1	-9054.4	3.4492	ug/L	3.4492 ppb	11:33:08
3	As 188.979†	23095.8	23895.6	9366.7	ug/L	9366.7 ppb	11:33:08
3	B 249.677†	224670.4	232345.0	4910.6	ug/L	4910.6 ppb	11:33:03
3	Ba 233.527†	1757611.2	1815884.0	13662	ug/L	13662 ppb	11:33:03
3	Be 313.107†	8035743.4	8307173.7	2818.3	ug/L	2818.3 ppb	11:32:56
3	Cd 226.502†	865292.2	894182.0	9434.6	ug/L	9434.6 ppb	11:33:03
3	Co 228.616†	432585.1	447003.6	9149.2	ug/L	9149.2 ppb	11:33:08
3	Cr 267.716†	2183202.0	2255489.0	23281	ug/L	23281 ppb	11:33:03
3	Cu 324.752†	7294915.8	7527867.3	20335	ug/L	20335 ppb	11:32:56
3	Mn 257.610†	8452101.9	8731654.7	9373.6	ug/L	9373.6 ppb	11:32:56
3	Mo 202.031†	138573.9	143146.2	9339.3	ug/L	9339.3 ppb	11:33:08
3	Ni 231.604†	385648.3	398341.2	9520.0	ug/L	9520.0 ppb	11:33:03
3	P 214.914†	32030.3	32843.9	13603	ug/L	13603 ppb	11:33:08
3	Pb 220.353†	192166.2	198583.8	23808	ug/L	23808 ppb	11:33:08
3	S 181.975 Axial†	38609.6	39836.4	51512	ug/L	51512 ppb	11:33:08
3	Sb 206.836†	31848.3	32867.3	10841	ug/L	10841 ppb	11:33:08
3	Se 196.026†	17345.2	17932.3	9999.7	ug/L	9999.7 ppb	11:33:08
3	Si 251.611†	1607660.6	1660444.8	46818	ug/L	46818 ppb	11:33:03
3	Sn 189.927†	55985.3	57834.6	10036	ug/L	10036 ppb	11:33:08
3	Ti 334.940†	6608190.7	6828190.7	9736.5	ug/L	9736.5 ppb	11:32:56
3	Tl 190.801†	30101.1	31148.0	9636.6	ug/L	9636.6 ppb	11:33:08
3	U 409.014†	302.8	1855.9	-7.9337	ug/L	-7.9337 ppb	11:33:08
3	V 292.402†	1595785.8	1650077.5	9905.6	ug/L	9905.6 ppb	11:33:03
3	Zn 213.857†	1479409.7	1527431.5	13506	ug/L	13506 ppb	11:33:03
3	SiO2†	1610923.5	1663810.6	100680	ug/L	100680 ppb	11:33:30

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	934345.6	97.079	%	0.4037				0.42%
Sc Radial	5251.9	97.1	%	0.49				0.50%
Y 371.029	807880.9	94.650	%	0.4751				0.50%
Y RADIAL	5610.5	96.02	%	0.422				0.44%
Ag 328.068†	-9129.8	3.1541	ug/L	0.35237	3.1541	ppb	0.35237	11.17%
Al 396.153Radial†	606.9	-14.842	ug/L	14.1172	-14.842	ppb	14.1172	95.12%
As 188.979†	23946.8	9386.3	ug/L	22.21	9386.3	ppb	22.21	0.24%
QC value within limits for As 188.979 Recovery = 93.86%								
B 249.677†	232003.7	4903.3	ug/L	7.55	4903.3	ppb	7.55	0.15%
QC value within limits for B 249.677 Recovery = 98.07%								
Ba 233.527†	1814936.2	13655	ug/L	21.2	13655	ppb	21.2	0.15%
QC value within limits for Ba 233.527 Recovery = 91.03%								
Be 313.107†	8294153.1	2813.8	ug/L	7.70	2813.8	ppb	7.70	0.27%
QC value within limits for Be 313.107 Recovery = 93.79%								
Ca 317.933Radial†	15.8	24.952	ug/L	3.3768	24.952	ppb	3.3768	13.53%
Cd 226.502†	892856.5	9420.6	ug/L	22.84	9420.6	ppb	22.84	0.24%
QC value within limits for Cd 226.502 Recovery = 94.21%								

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Co 228.616†          447810.9      9165.9 ug/L        17.06      9165.9 ppb        17.06   0.19%
   QC value within limits for Co 228.616  Recovery = 91.66%
Cr 267.716†         2254009.8       23266 ug/L         26.8       23266 ppb         26.8   0.12%
   QC value within limits for Cr 267.716  Recovery = 93.06%
Cu 324.752†         7490958.4       20235 ug/L         89.5       20235 ppb         89.5   0.44%
   QC value within limits for Cu 324.752  Recovery = 101.18%
Fe 238.204 Radial†       -31.8     -7.7694 ug/L      6.24142     -7.7694 ppb      6.24142  80.33%
K 766.490 Radial†    1787176.2      304070 ug/L       2423.3      304070 ppb       2423.3   0.80%
   QC value within limits for K 766.490 Radial  Recovery = 101.36%
Mg 279.077 IEC†           -5.7     -91.544 ug/L      29.5787     -91.544 ppb     29.5787  32.31%
Mn 257.610†          8692371.2      9331.4 ug/L        49.16      9331.4 ppb        49.16   0.53%
   QC value within limits for Mn 257.610  Recovery = 93.31%
Mo 202.031†           143497.8      9362.3 ug/L        19.95      9362.3 ppb        19.95   0.21%
   QC value within limits for Mo 202.031  Recovery = 93.62%
Na 589.592 Radial†       378.1      110.29 ug/L       16.441      110.29 ppb      16.441  14.91%
Ni 231.604†           397840.8      9508.0 ug/L        18.32      9508.0 ppb        18.32   0.19%
   QC value within limits for Ni 231.604  Recovery = 95.08%
P 214.914†             32873.8       13639 ug/L         55.7       13639 ppb         55.7   0.41%
   QC value within limits for P 214.914  Recovery = 90.93%
Pb 220.353†           198909.5       23847 ug/L         44.7       23847 ppb         44.7   0.19%
   QC value within limits for Pb 220.353  Recovery = 95.39%
S 181.975 Axial†       39929.5       51633 ug/L        105.9       51633 ppb        105.9   0.21%
   QC value within limits for S 181.975 Axial  Recovery = 103.27%
Sb 206.836†            32964.8       10873 ug/L         27.8       10873 ppb         27.8   0.26%
   QC value within limits for Sb 206.836  Recovery = 108.73%
Se 196.026†            17992.0       10033 ug/L         28.8       10033 ppb         28.8   0.29%
   QC value within limits for Se 196.026  Recovery = 100.33%
Si 251.611†          1659784.1       46799 ug/L         55.7       46799 ppb         55.7   0.12%
   QC value within limits for Si 251.611  Recovery = 93.60%
Sn 189.927†            57932.7       10053 ug/L         23.8       10053 ppb         23.8   0.24%
   QC value within limits for Sn 189.927  Recovery = 100.53%
Sr 421.552†          1614169.0      9877.9 ug/L        99.13      9877.9 ppb        99.13   1.00%
   QC value within limits for Sr 421.552  Recovery = 98.78%
Ti 334.940†          6798632.3      9694.3 ug/L        44.61      9694.3 ppb        44.61   0.46%
   QC value within limits for Ti 334.940  Recovery = 96.94%
Tl 190.801†            31193.8      9650.1 ug/L        14.36      9650.1 ppb        14.36   0.15%
   QC value within limits for Tl 190.801  Recovery = 96.50%
U 409.014†              1886.9     -7.1630 ug/L      3.08736     -7.1630 ppb      3.08736  43.10%
V 292.402†           1650236.7      9906.9 ug/L         2.26      9906.9 ppb         2.26   0.02%
   QC value within limits for V 292.402  Recovery = 99.07%
Zn 213.857†          1525340.4       13487 ug/L         31.2       13487 ppb         31.2   0.23%
   QC value less than the lower limit for Zn 213.857  Recovery = 89.92%
SiO2†                1654116.9      100090 ug/L        814.3      100090 ppb        814.3   0.81%
   QC value within limits for SiO2  Recovery = 93.55%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/29/2010 11:35:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5302.8	5302.8	98.1	%			11:37:33
1	Y RADIAL	5703.7	5703.7	97.62	%			11:37:33
1	Al 396.153Radial†	6625.9	6754.2	4863.3	ug/L	4863.3	ppb	11:37:33
1	Ca 317.933Radial†	3213.9	3260.0	5156.2	ug/L	5156.2	ppb	11:37:54
1	Fe 238.204 Radial†	600.4	602.7	5352.7	ug/L	5352.7	ppb	11:37:54
1	K 766.490 Radial†	32333.8	30600.8	5200.1	ug/L	5200.1	ppb	11:37:33
1	Mg 279.077 IEC†	156.1	157.9	5303.3	ug/L	5303.3	ppb	11:37:54
1	Na 589.592 Radial†	34938.9	36521.6	10652	ug/L	10652	ppb	11:37:33
1	Sr 421.552†	79970.5	81538.0	498.93	ug/L	498.93	ppb	11:37:33
1	Sc 361.383	949326.1	949326.1	98.635	%			11:38:51
1	Y 371.029	834142.7	834142.7	97.727	%			11:38:51
1	Ag 328.068†	123838.3	125250.2	501.56	ug/L	501.56	ppb	11:38:56
1	As 188.979†	1314.4	1366.6	536.49	ug/L	536.49	ppb	11:39:16
1	B 249.677†	24055.4	24613.9	520.68	ug/L	520.68	ppb	11:38:56
1	Ba 233.527†	65474.3	66380.0	499.87	ug/L	499.87	ppb	11:38:56
1	Be 313.107†	1447113.0	1472140.9	496.63	ug/L	496.63	ppb	11:38:51
1	Cd 226.502†	46756.6	47604.9	501.82	ug/L	501.82	ppb	11:38:56
1	Co 228.616†	24044.9	24453.9	500.71	ug/L	500.71	ppb	11:38:56
1	Cr 267.716†	47835.8	48401.3	499.91	ug/L	499.91	ppb	11:38:56
1	Cu 324.752†	189777.7	183494.2	495.68	ug/L	495.68	ppb	11:38:56
1	Mn 257.610†	455797.8	461429.7	495.66	ug/L	495.66	ppb	11:38:51
1	Mo 202.031†	7488.8	7570.3	494.39	ug/L	494.39	ppb	11:39:16
1	Ni 231.604†	20744.6	20938.5	500.40	ug/L	500.40	ppb	11:38:56
1	P 214.914†	4840.3	4658.9	2392.3	ug/L	2392.3	ppb	11:39:16
1	Pb 220.353†	4105.8	4209.0	505.93	ug/L	505.93	ppb	11:39:16
1	S 181.975 Axial†	828.4	786.6	1016.2	ug/L	1016.2	ppb	11:39:16
1	Sb 206.836†	1606.1	1591.4	525.95	ug/L	525.95	ppb	11:39:16
1	Se 196.026†	884.0	908.3	524.55	ug/L	524.55	ppb	11:39:16
1	Si 251.611†	87445.1	88137.7	2485.1	ug/L	2485.1	ppb	11:38:56
1	Sn 189.927†	2827.7	2859.8	497.15	ug/L	497.15	ppb	11:39:16
1	Ti 334.940†	339772.4	345380.6	492.77	ug/L	492.77	ppb	11:38:51
1	Tl 190.801†	1553.4	1623.8	502.20	ug/L	502.20	ppb	11:39:16
1	U 409.014†	19206.6	21015.4	497.67	ug/L	497.67	ppb	11:38:56
1	V 292.402†	81415.6	83925.8	504.61	ug/L	504.61	ppb	11:38:56
1	Zn 213.857†	56654.6	56410.9	497.68	ug/L	497.68	ppb	11:38:56
1	SiO2†	87082.0	87764.2	5310.9	ug/L	5310.9	ppb	11:40:24
2	Sc Radial	5297.4	5297.4	98.0	%			11:37:59
2	Y RADIAL	5717.3	5717.3	97.85	%			11:37:59
2	Al 396.153Radial†	6631.9	6767.2	4872.9	ug/L	4872.9	ppb	11:37:59
2	Ca 317.933Radial†	3192.6	3241.6	5127.1	ug/L	5127.1	ppb	11:38:19
2	Fe 238.204 Radial†	595.3	598.1	5312.1	ug/L	5312.1	ppb	11:38:19
2	K 766.490 Radial†	32296.0	30595.9	5199.2	ug/L	5199.2	ppb	11:37:59
2	Mg 279.077 IEC†	160.5	162.5	5457.9	ug/L	5457.9	ppb	11:38:19
2	Na 589.592 Radial†	35093.5	36715.8	10709	ug/L	10709	ppb	11:37:59
2	Sr 421.552†	80392.8	82052.5	502.08	ug/L	502.08	ppb	11:37:59
2	Sc 361.383	960717.4	960717.4	99.819	%			11:39:22
2	Y 371.029	842297.6	842297.6	98.683	%			11:39:22
2	Ag 328.068†	124557.3	124481.8	498.48	ug/L	498.48	ppb	11:39:28
2	As 188.979†	1305.6	1342.0	526.91	ug/L	526.91	ppb	11:39:48
2	B 249.677†	24164.4	24433.9	516.87	ug/L	516.87	ppb	11:39:28
2	Ba 233.527†	65972.1	66091.6	497.70	ug/L	497.70	ppb	11:39:28
2	Be 313.107†	1456024.6	1463672.6	493.78	ug/L	493.78	ppb	11:39:22
2	Cd 226.502†	47017.9	47304.6	498.66	ug/L	498.66	ppb	11:39:28
2	Co 228.616†	24208.4	24328.6	498.14	ug/L	498.14	ppb	11:39:28
2	Cr 267.716†	48055.5	48046.4	496.24	ug/L	496.24	ppb	11:39:28
2	Cu 324.752†	191494.8	182933.0	494.16	ug/L	494.16	ppb	11:39:28
2	Mn 257.610†	460023.0	460183.3	494.32	ug/L	494.32	ppb	11:39:22
2	Mo 202.031†	7512.4	7503.9	490.05	ug/L	490.05	ppb	11:39:48
2	Ni 231.604†	20920.0	20864.9	498.64	ug/L	498.64	ppb	11:39:28

2	P 214.914†	4843.6	4604.0	2363.3 ug/L	2363.3 ppb	11:39:48
2	Pb 220.353†	4098.2	4152.1	499.10 ug/L	499.10 ppb	11:39:48
2	S 181.975 Axial†	809.7	757.9	979.06 ug/L	979.06 ppb	11:39:48
2	Sb 206.836†	1620.0	1586.0	524.08 ug/L	524.08 ppb	11:39:48
2	Se 196.026†	870.7	884.3	511.09 ug/L	511.09 ppb	11:39:48
2	Si 251.611†	88023.3	87665.7	2471.9 ug/L	2471.9 ppb	11:39:28
2	Sn 189.927†	2845.5	2843.7	494.35 ug/L	494.35 ppb	11:39:48
2	Ti 334.940†	342900.8	344430.2	491.40 ug/L	491.40 ppb	11:39:22
2	Tl 190.801†	1568.0	1619.7	500.94 ug/L	500.94 ppb	11:39:48
2	U 409.014†	19257.9	20835.9	493.42 ug/L	493.42 ppb	11:39:28
2	V 292.402†	81821.0	83353.3	501.16 ug/L	501.16 ppb	11:39:28
2	Zn 213.857†	57079.2	56155.2	495.42 ug/L	495.42 ppb	11:39:28
2	SiO2†	87186.0	86821.5	5253.8 ug/L	5253.8 ppb	11:40:29
3	Sc Radial	5215.3	5215.3	96.4 %		11:38:24
3	Y RADIAL	5657.9	5657.9	96.83 %		11:38:24
3	Al 396.153Radial†	6571.8	6811.5	4904.9 ug/L	4904.9 ppb	11:38:24
3	Ca 317.933Radial†	3195.9	3296.4	5213.8 ug/L	5213.8 ppb	11:38:44
3	Fe 238.204 Radial†	596.2	608.7	5405.5 ug/L	5405.5 ppb	11:38:44
3	K 766.490 Radial†	31999.9	30808.0	5235.3 ug/L	5235.3 ppb	11:38:24
3	Mg 279.077 IEC†	156.0	160.4	5389.0 ug/L	5389.0 ppb	11:38:44
3	Na 589.592 Radial†	34841.0	37018.1	10797 ug/L	10797 ppb	11:38:24
3	Sr 421.552†	79823.8	82754.6	506.38 ug/L	506.38 ppb	11:38:24
3	Sc 361.383	958261.5	958261.5	99.564 %		11:39:54
3	Y 371.029	838898.9	838898.9	98.284 %		11:39:54
3	Ag 328.068†	122448.1	122683.2	491.32 ug/L	491.32 ppb	11:39:59
3	As 188.979†	1302.7	1342.5	527.09 ug/L	527.09 ppb	11:40:19
3	B 249.677†	23640.8	23970.1	507.02 ug/L	507.02 ppb	11:39:59
3	Ba 233.527†	64846.4	65130.3	490.46 ug/L	490.46 ppb	11:39:59
3	Be 313.107†	1450800.1	1462163.7	493.27 ug/L	493.27 ppb	11:39:54
3	Cd 226.502†	46147.4	46551.0	490.70 ug/L	490.70 ppb	11:39:59
3	Co 228.616†	23707.6	23887.8	489.12 ug/L	489.12 ppb	11:39:59
3	Cr 267.716†	47246.6	47357.3	489.13 ug/L	489.13 ppb	11:39:59
3	Cu 324.752†	188179.6	180095.0	486.50 ug/L	486.50 ppb	11:39:59
3	Mn 257.610†	459746.1	461086.4	495.30 ug/L	495.30 ppb	11:39:54
3	Mo 202.031†	7523.7	7534.6	492.06 ug/L	492.06 ppb	11:40:19
3	Ni 231.604†	20518.8	20515.6	490.30 ug/L	490.30 ppb	11:39:59
3	P 214.914†	4821.1	4593.8	2359.3 ug/L	2359.3 ppb	11:40:19
3	Pb 220.353†	4109.5	4173.9	501.73 ug/L	501.73 ppb	11:40:19
3	S 181.975 Axial†	819.1	769.4	993.97 ug/L	993.97 ppb	11:40:19
3	Sb 206.836†	1609.3	1579.4	522.00 ug/L	522.00 ppb	11:40:19
3	Se 196.026†	876.7	892.6	516.01 ug/L	516.01 ppb	11:40:19
3	Si 251.611†	86631.2	86493.5	2438.7 ug/L	2438.7 ppb	11:39:59
3	Sn 189.927†	2837.2	2842.7	494.18 ug/L	494.18 ppb	11:40:19
3	Ti 334.940†	342553.7	344962.0	492.18 ug/L	492.18 ppb	11:39:54
3	Tl 190.801†	1566.2	1621.9	501.68 ug/L	501.68 ppb	11:40:19
3	U 409.014†	19262.8	20890.2	494.72 ug/L	494.72 ppb	11:39:59
3	V 292.402†	80248.2	81983.6	493.04 ug/L	493.04 ppb	11:39:59
3	Zn 213.857†	56309.3	55528.4	489.89 ug/L	489.89 ppb	11:39:59
3	SiO2†	87010.6	86869.3	5256.6 ug/L	5256.6 ppb	11:40:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	956101.6	99.339	%	0.6229				0.63%
Sc Radial	5271.8	97.5	%	0.91				0.93%
Y 371.029	838446.4	98.231	%	0.4799				0.49%
Y RADIAL	5693.0	97.44	%	0.533				0.55%
Ag 328.068†	124138.4	497.12	ug/L	5.254	497.12	ppb	5.254	1.06%
QC value within limits for Ag 328.068 Recovery = 99.42%								
Al 396.153Radial†	6777.6	4880.4	ug/L	21.79	4880.4	ppb	21.79	0.45%
QC value within limits for Al 396.153Radial Recovery = 97.61%								
As 188.979†	1350.4	530.16	ug/L	5.478	530.16	ppb	5.478	1.03%
QC value within limits for As 188.979 Recovery = 106.03%								
B 249.677†	24339.3	514.86	ug/L	7.047	514.86	ppb	7.047	1.37%
QC value within limits for B 249.677 Recovery = 102.97%								
Ba 233.527†	65867.3	496.01	ug/L	4.927	496.01	ppb	4.927	0.99%
QC value within limits for Ba 233.527 Recovery = 99.20%								
Be 313.107†	1465992.4	494.56	ug/L	1.811	494.56	ppb	1.811	0.37%
QC value within limits for Be 313.107 Recovery = 98.91%								
Ca 317.933Radial†	3266.0	5165.7	ug/L	44.10	5165.7	ppb	44.10	0.85%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.31%
Cd 226.502†            47153.5      497.06 ug/L         5.732      497.06 ppb          5.732   1.15%
   QC value within limits for Cd 226.502  Recovery = 99.41%
Co 228.616†            24223.4      495.99 ug/L         6.090      495.99 ppb          6.090   1.23%
   QC value within limits for Co 228.616  Recovery = 99.20%
Cr 267.716†            47935.0      495.09 ug/L         5.483      495.09 ppb          5.483   1.11%
   QC value within limits for Cr 267.716  Recovery = 99.02%
Cu 324.752†           182174.1      492.11 ug/L         4.920      492.11 ppb          4.920   1.00%
   QC value within limits for Cu 324.752  Recovery = 98.42%
Fe 238.204 Radial†       603.1      5356.8 ug/L        46.81      5356.8 ppb         46.81   0.87%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.14%
K 766.490 Radial†      30668.2      5211.5 ug/L        20.56      5211.5 ppb         20.56   0.39%
   QC value within limits for K 766.490 Radial  Recovery = 104.23%
Mg 279.077 IEC†          160.3      5383.4 ug/L        77.47      5383.4 ppb         77.47   1.44%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.67%
Mn 257.610†           460899.8      495.09 ug/L         0.697      495.09 ppb          0.697   0.14%
   QC value within limits for Mn 257.610  Recovery = 99.02%
Mo 202.031†             7536.3      492.17 ug/L         2.169      492.17 ppb          2.169   0.44%
   QC value within limits for Mo 202.031  Recovery = 98.43%
Na 589.592 Radial†     36751.9       10719 ug/L          73.0       10719 ppb           73.0   0.68%
   QC value within limits for Na 589.592 Radial  Recovery = 107.19%
Ni 231.604†            20773.0      496.45 ug/L         5.399      496.45 ppb          5.399   1.09%
   QC value within limits for Ni 231.604  Recovery = 99.29%
P 214.914†              4618.9      2371.6 ug/L        18.00      2371.6 ppb         18.00   0.76%
   QC value within limits for P 214.914  Recovery = 94.86%
Pb 220.353†             4178.3      502.25 ug/L         3.443      502.25 ppb          3.443   0.69%
   QC value within limits for Pb 220.353  Recovery = 100.45%
S 181.975 Axial†         771.3      996.41 ug/L        18.695      996.41 ppb         18.695   1.88%
   QC value within limits for S 181.975 Axial  Recovery = 99.64%
Sb 206.836†             1585.6      524.01 ug/L         1.975      524.01 ppb          1.975   0.38%
   QC value within limits for Sb 206.836  Recovery = 104.80%
Se 196.026†              895.1      517.21 ug/L         6.810      517.21 ppb          6.810   1.32%
   QC value within limits for Se 196.026  Recovery = 103.44%
Si 251.611†            87432.3      2465.2 ug/L        23.92      2465.2 ppb         23.92   0.97%
   QC value within limits for Si 251.611  Recovery = 98.61%
Sn 189.927†             2848.7      495.23 ug/L         1.669      495.23 ppb          1.669   0.34%
   QC value within limits for Sn 189.927  Recovery = 99.05%
Sr 421.552†            82115.0      502.46 ug/L         3.737      502.46 ppb          3.737   0.74%
   QC value within limits for Sr 421.552  Recovery = 100.49%
Ti 334.940†           344924.3      492.12 ug/L         0.687      492.12 ppb          0.687   0.14%
   QC value within limits for Ti 334.940  Recovery = 98.42%
Tl 190.801†             1621.8      501.61 ug/L         0.633      501.61 ppb          0.633   0.13%
   QC value within limits for Tl 190.801  Recovery = 100.32%
U 409.014†             20913.8      495.27 ug/L         2.179      495.27 ppb          2.179   0.44%
   QC value within limits for U 409.014  Recovery = 99.05%
V 292.402†             83087.6      499.60 ug/L         5.937      499.60 ppb          5.937   1.19%
   QC value within limits for V 292.402  Recovery = 99.92%
Zn 213.857†            56031.5      494.33 ug/L         4.003      494.33 ppb          4.003   0.81%
   QC value within limits for Zn 213.857  Recovery = 98.87%
SiO2†                  87151.7      5273.8 ug/L        32.16      5273.8 ppb         32.16   0.61%
   QC value within limits for SiO2  Recovery = 98.62%
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/29/2010 11:42:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5529.0	5529.0	102	%			11:44:37
1	Y RADIAL	5957.3	5957.3	102.0	%			11:44:37
1	Al 396.153Radial†	26.2	22.6	16.321	ug/L	16.321	ppb	11:44:57
1	Ca 317.933Radial†	21.1	3.1	4.9514	ug/L	4.9514	ppb	11:44:57
1	Fe 238.204 Radial†	10.5	0.6	5.5628	ug/L	5.5628	ppb	11:44:57
1	K 766.490 Radial†	2839.6	403.6	68.675	ug/L	68.675	ppb	11:44:37
1	Mg 279.077 IEC†	-1.7	-3.0	-99.771	ug/L	-99.771	ppb	11:44:57
1	Na 589.592 Radial†	-895.0	14.9	4.3553	ug/L	4.3553	ppb	11:44:37
1	Sr 421.552†	55.6	37.0	0.2264	ug/L	0.2264	ppb	11:44:37
1	Sc 361.383	942022.5	942022.5	97.877	%			11:45:54
1	Y 371.029	828715.3	828715.3	97.091	%			11:45:54
1	Ag 328.068†	478.3	187.3	0.7365	ug/L	0.7365	ppb	11:45:54
1	As 188.979†	42.8	77.8	30.307	ug/L	30.307	ppb	11:46:14
1	B 249.677†	595.6	834.2	17.724	ug/L	17.724	ppb	11:46:14
1	Ba 233.527†	26.8	27.2	0.2029	ug/L	0.2029	ppb	11:46:14
1	Be 313.107†	-4780.8	123.5	0.0418	ug/L	0.0418	ppb	11:45:54
1	Cd 226.502†	-104.2	95.0	1.0029	ug/L	1.0029	ppb	11:46:14
1	Co 228.616†	-72.6	2.2	0.0451	ug/L	0.0451	ppb	11:46:14
1	Cr 267.716†	161.6	68.8	0.7054	ug/L	0.7054	ppb	11:46:14
1	Cu 324.752†	9039.2	326.3	0.8767	ug/L	0.8767	ppb	11:45:54
1	Mn 257.610†	809.9	153.6	0.1695	ug/L	0.1695	ppb	11:46:14
1	Mo 202.031†	31.8	10.5	0.6830	ug/L	0.6830	ppb	11:46:14
1	Ni 231.604†	106.1	15.4	0.3677	ug/L	0.3677	ppb	11:46:14
1	P 214.914†	251.1	8.1	4.1927	ug/L	4.1927	ppb	11:46:14
1	Pb 220.353†	35.0	82.2	9.8566	ug/L	9.8566	ppb	11:46:14
1	S 181.975 Axial†	49.6	-2.6	-3.3240	ug/L	-3.3240	ppb	11:46:14
1	Sb 206.836†	78.4	43.2	13.831	ug/L	13.831	ppb	11:46:14
1	Se 196.026†	-16.7	-5.0	-2.7740	ug/L	-2.7740	ppb	11:46:14
1	Si 251.611†	787.3	287.2	8.1093	ug/L	8.1093	ppb	11:46:14
1	Sn 189.927†	22.2	15.7	2.7238	ug/L	2.7238	ppb	11:46:14
1	Ti 334.940†	-811.1	79.0	0.1172	ug/L	0.1172	ppb	11:45:54
1	Tl 190.801†	-42.4	5.5	1.7000	ug/L	1.7000	ppb	11:46:14
1	U 409.014†	-1126.7	391.9	9.3117	ug/L	9.3117	ppb	11:45:54
1	V 292.402†	-1466.5	-114.4	-0.6548	ug/L	-0.6548	ppb	11:45:54
1	Zn 213.857†	1280.0	280.3	2.4903	ug/L	2.4903	ppb	11:46:14
1	SiO2†	751.9	245.7	14.889	ug/L	14.889	ppb	11:47:10
2	Sc Radial	5516.7	5516.7	102	%			11:45:02
2	Y RADIAL	5935.2	5935.2	101.6	%			11:45:02
2	Al 396.153Radial†	10.7	7.4	5.3627	ug/L	5.3627	ppb	11:45:22
2	Ca 317.933Radial†	21.0	3.0	4.7865	ug/L	4.7865	ppb	11:45:22
2	Fe 238.204 Radial†	10.0	0.1	1.3021	ug/L	1.3021	ppb	11:45:22
2	K 766.490 Radial†	2803.4	374.3	63.682	ug/L	63.682	ppb	11:45:02
2	Mg 279.077 IEC†	3.9	2.5	83.494	ug/L	83.494	ppb	11:45:22
2	Na 589.592 Radial†	-912.7	-4.4	-1.2875	ug/L	-1.2875	ppb	11:45:02
2	Sr 421.552†	36.5	18.4	0.1127	ug/L	0.1127	ppb	11:45:02
2	Sc 361.383	943236.4	943236.4	98.003	%			11:46:19
2	Y 371.029	829805.4	829805.4	97.219	%			11:46:19
2	Ag 328.068†	551.4	261.3	1.0360	ug/L	1.0360	ppb	11:46:19
2	As 188.979†	40.4	75.2	29.300	ug/L	29.300	ppb	11:46:39
2	B 249.677†	558.1	795.1	16.893	ug/L	16.893	ppb	11:46:39
2	Ba 233.527†	22.5	22.7	0.1741	ug/L	0.1741	ppb	11:46:39
2	Be 313.107†	-4373.6	545.2	0.1850	ug/L	0.1850	ppb	11:46:19
2	Cd 226.502†	-100.6	98.7	1.0430	ug/L	1.0430	ppb	11:46:39
2	Co 228.616†	-66.3	8.7	0.1773	ug/L	0.1773	ppb	11:46:39
2	Cr 267.716†	117.9	24.0	0.2450	ug/L	0.2450	ppb	11:46:39
2	Cu 324.752†	9581.0	867.3	2.3365	ug/L	2.3365	ppb	11:46:19
2	Mn 257.610†	815.0	157.8	0.1661	ug/L	0.1661	ppb	11:46:39
2	Mo 202.031†	24.0	2.5	0.1600	ug/L	0.1600	ppb	11:46:39
2	Ni 231.604†	91.3	0.1	0.0016	ug/L	0.0016	ppb	11:46:39

2	P 214.914†	255.2	12.0	6.0004 ug/L	6.0004 ppb	11:46:39
2	Pb 220.353†	11.5	58.1	6.9651 ug/L	6.9651 ppb	11:46:39
2	S 181.975 Axial†	50.3	-2.0	-2.5455 ug/L	-2.5455 ppb	11:46:39
2	Sb 206.836†	80.3	45.1	14.450 ug/L	14.450 ppb	11:46:39
2	Se 196.026†	-11.3	0.5	0.2895 ug/L	0.2895 ppb	11:46:39
2	Si 251.611†	763.7	262.1	7.4061 ug/L	7.4061 ppb	11:46:39
2	Sn 189.927†	30.1	23.7	4.1198 ug/L	4.1198 ppb	11:46:39
2	Ti 334.940†	-447.1	451.5	0.6329 ug/L	0.6329 ppb	11:46:19
2	Tl 190.801†	-48.8	-1.0	-0.2972 ug/L	-0.2972 ppb	11:46:39
2	U 409.014†	-1024.4	497.8	11.829 ug/L	11.829 ppb	11:46:19
2	V 292.402†	-1118.3	242.8	1.4662 ug/L	1.4662 ppb	11:46:19
2	Zn 213.857†	1270.4	268.8	2.3892 ug/L	2.3892 ppb	11:46:39
2	SiO2†	796.7	290.4	17.613 ug/L	17.613 ppb	11:47:15
3	Sc Radial	5464.9	5464.9	101 %		11:45:27
3	Y RADIAL	5878.9	5878.9	100.6 %		11:45:27
3	Al 396.153Radial†	20.8	17.6	12.666 ug/L	12.666 ppb	11:45:47
3	Ca 317.933Radial†	20.1	2.4	3.7262 ug/L	3.7262 ppb	11:45:47
3	Fe 238.204 Radial†	8.9	-0.8	-7.1738 ug/L	-7.1738 ppb	11:45:47
3	K 766.490 Radial†	2800.4	397.5	67.624 ug/L	67.624 ppb	11:45:27
3	Mg 279.077 IEC†	3.7	2.4	79.873 ug/L	79.873 ppb	11:45:47
3	Na 589.592 Radial†	-875.1	24.3	7.0935 ug/L	7.0935 ppb	11:45:27
3	Sr 421.552†	32.9	15.2	0.0929 ug/L	0.0929 ppb	11:45:27
3	Sc 361.383	941049.7	941049.7	97.776 %		11:46:44
3	Y 371.029	828164.6	828164.6	97.027 %		11:46:44
3	Ag 328.068†	459.3	168.4	0.6608 ug/L	0.6608 ppb	11:46:44
3	As 188.979†	22.1	56.7	22.071 ug/L	22.071 ppb	11:47:04
3	B 249.677†	492.5	729.4	15.499 ug/L	15.499 ppb	11:47:04
3	Ba 233.527†	22.4	22.7	0.1694 ug/L	0.1694 ppb	11:47:04
3	Be 313.107†	-4808.0	90.6	0.0307 ug/L	0.0307 ppb	11:46:44
3	Cd 226.502†	-121.9	76.7	0.8112 ug/L	0.8112 ppb	11:47:04
3	Co 228.616†	-67.1	7.7	0.1592 ug/L	0.1592 ppb	11:47:04
3	Cr 267.716†	116.2	22.5	0.2290 ug/L	0.2290 ppb	11:47:04
3	Cu 324.752†	9039.1	335.8	0.9031 ug/L	0.9031 ppb	11:46:44
3	Mn 257.610†	830.1	175.1	0.1840 ug/L	0.1840 ppb	11:47:04
3	Mo 202.031†	35.2	13.9	0.9068 ug/L	0.9068 ppb	11:47:04
3	Ni 231.604†	101.5	10.8	0.2581 ug/L	0.2581 ppb	11:47:04
3	P 214.914†	257.8	15.3	8.0169 ug/L	8.0169 ppb	11:47:04
3	Pb 220.353†	11.9	58.6	7.0297 ug/L	7.0297 ppb	11:47:04
3	S 181.975 Axial†	47.9	-4.2	-5.4912 ug/L	-5.4912 ppb	11:47:04
3	Sb 206.836†	69.0	33.7	10.787 ug/L	10.787 ppb	11:47:04
3	Se 196.026†	-15.5	-3.8	-2.1457 ug/L	-2.1457 ppb	11:47:04
3	Si 251.611†	755.3	255.2	7.2031 ug/L	7.2031 ppb	11:47:04
3	Sn 189.927†	13.0	6.4	1.1089 ug/L	1.1089 ppb	11:47:04
3	Ti 334.940†	-816.6	72.5	0.0946 ug/L	0.0946 ppb	11:46:44
3	Tl 190.801†	-48.4	-0.6	-0.1934 ug/L	-0.1934 ppb	11:47:04
3	U 409.014†	-1243.9	270.9	6.4380 ug/L	6.4380 ppb	11:46:44
3	V 292.402†	-1420.0	-68.5	-0.3787 ug/L	-0.3787 ppb	11:46:44
3	Zn 213.857†	1262.3	263.6	2.3434 ug/L	2.3434 ppb	11:47:04
3	SiO2†	781.5	276.7	16.762 ug/L	16.762 ppb	11:47:20

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	942102.8	97.885	%	0.1138				0.12%
Sc Radial	5503.5	102	%	0.6				0.62%
Y 371.029	828895.1	97.112	%	0.0978				0.10%
Y RADIAL	5923.8	101.4	%	0.69				0.68%
Ag 328.068†	205.7	0.8111	ug/L	0.19839	0.8111	ppb	0.19839	24.46%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	15.9	11.450	ug/L	5.5794	11.450	ppb	5.5794	48.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	69.9	27.226	ug/L	4.4928	27.226	ppb	4.4928	16.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	786.2	16.705	ug/L	1.1242	16.705	ppb	1.1242	6.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	24.2	0.1821	ug/L	0.01812	0.1821	ppb	0.01812	9.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	253.1	0.0858	ug/L	0.08603	0.0858	ppb	0.08603	100.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.8	4.4880	ug/L	0.66491	4.4880	ppb	0.66491	14.82%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                90.1      0.9524 ug/L       0.12386      0.9524 ppb        0.12386  13.01%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.2      0.1272 ug/L       0.07167      0.1272 ppb        0.07167  56.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                38.4      0.3931 ug/L       0.27053      0.3931 ppb        0.27053  68.82%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               509.8      1.3721 ug/L       0.83529      1.3721 ppb        0.83529  60.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.0     -0.1029 ug/L       6.48354     -0.1029 ppb        6.48354 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         391.8      66.661 ug/L        2.6322      66.661 ppb         2.6322   3.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.6      21.199 ug/L      104.7784      21.199 ppb       104.7784 494.27%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               162.2      0.1732 ug/L       0.00953      0.1732 ppb        0.00953   5.50%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 8.9      0.5833 ug/L       0.38325      0.5833 ppb        0.38325  65.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         11.6      3.3871 ug/L       4.27353      3.3871 ppb        4.27353 126.17%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.7      0.2092 ug/L       0.18790      0.2092 ppb        0.18790  89.84%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 11.8      6.0700 ug/L       1.91301      6.0700 ppb        1.91301  31.52%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                66.3      7.9505 ug/L       1.65109      7.9505 ppb        1.65109  20.77%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.9     -3.7869 ug/L       1.52648     -3.7869 ppb        1.52648  40.31%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                40.6      13.023 ug/L        1.9609      13.023 ppb         1.9609  15.06%
   QC value greater than the upper limit for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.8     -1.5434 ug/L       1.61813     -1.5434 ppb        1.61813 104.84%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               268.2      7.5728 ug/L       0.47556      7.5728 ppb        0.47556   6.28%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                15.3      2.6508 ug/L       1.50680      2.6508 ppb        1.50680  56.84%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                23.5      0.1440 ug/L       0.07203      0.1440 ppb        0.07203  50.01%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               201.0      0.2815 ug/L       0.30449      0.2815 ppb        0.30449 108.15%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.3      0.4031 ug/L       1.12433      0.4031 ppb        1.12433 278.89%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                386.9      9.1930 ug/L       2.69756      9.1930 ppb        2.69756  29.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 20.0      0.1442 ug/L       1.15317      0.1442 ppb        1.15317 799.60%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               270.9      2.4077 ug/L       0.07514      2.4077 ppb        0.07514   3.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     270.9      16.421 ug/L        1.3939      16.421 ppb         1.3939   8.49%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

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Analysis Begun

Start Time: 1/29/2010 11:49:31 **Plasma On Time: 00:00:00**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\012910.sif
Batch ID:
Results Data Set: 012910
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 1/29/2010 10:21:30**
IEC File: 011110.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/29/2010 11:49:32**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5372.0	5372.0	99.3	%			11:51:24
1	Y RADIAL	5758.5	5758.5	98.56	%			11:51:24
1	Al 396.153Radial†	6633.2	6674.5	4805.9	ug/L	4805.9	ppb	11:51:24

1	Ca 317.933Radial†	3167.1	3170.7	5014.9 ug/L	5014.9 ppb	11:51:44
1	Fe 238.204 Radial†	585.8	580.1	5152.3 ug/L	5152.3 ppb	11:51:44
1	K 766.490 Radial†	31790.7	29629.2	5035.0 ug/L	5035.0 ppb	11:51:24
1	Mg 279.077 IEC†	155.3	155.1	5208.2 ug/L	5208.2 ppb	11:51:44
1	Na 589.592 Radial†	34103.1	35221.1	10273 ug/L	10273 ppb	11:51:24
1	Sr 421.552†	79271.2	79783.2	488.20 ug/L	488.20 ppb	11:51:24
1	Sc 361.383	967359.1	967359.1	100.51 %		11:52:42
1	Y 371.029	848523.9	848523.9	99.412 %		11:52:42
1	Ag 328.068†	123200.9	122275.6	489.61 ug/L	489.61 ppb	11:52:47
1	As 188.979†	1244.7	1272.5	499.75 ug/L	499.75 ppb	11:53:07
1	B 249.677†	23137.2	23245.6	491.68 ug/L	491.68 ppb	11:52:47
1	Ba 233.527†	65091.7	64761.9	487.68 ug/L	487.68 ppb	11:52:47
1	Be 313.107†	1456288.0	1453919.8	490.49 ug/L	490.49 ppb	11:52:42
1	Cd 226.502†	46423.5	46389.8	489.02 ug/L	489.02 ppb	11:52:47
1	Co 228.616†	23898.3	23853.6	488.42 ug/L	488.42 ppb	11:52:47
1	Cr 267.716†	47447.3	47110.7	486.58 ug/L	486.58 ppb	11:52:47
1	Cu 324.752†	189075.2	179208.5	484.09 ug/L	484.09 ppb	11:52:47
1	Mn 257.610†	459443.9	456443.0	490.29 ug/L	490.29 ppb	11:52:42
1	Mo 202.031†	7547.2	7486.9	488.93 ug/L	488.93 ppb	11:53:07
1	Ni 231.604†	20641.8	20444.2	488.59 ug/L	488.59 ppb	11:52:47
1	P 214.914†	4864.1	4591.1	2358.4 ug/L	2358.4 ppb	11:53:07
1	Pb 220.353†	4094.8	4120.5	495.32 ug/L	495.32 ppb	11:53:07
1	S 181.975 Axial†	814.3	756.9	977.85 ug/L	977.85 ppb	11:53:07
1	Sb 206.836†	1586.4	1541.5	509.75 ug/L	509.75 ppb	11:53:07
1	Se 196.026†	879.6	887.2	512.15 ug/L	512.15 ppb	11:53:07
1	Si 251.611†	86756.9	85800.2	2419.1 ug/L	2419.1 ppb	11:52:47
1	Sn 189.927†	2833.8	2812.5	488.91 ug/L	488.91 ppb	11:53:07
1	Ti 334.940†	343033.3	342203.5	488.23 ug/L	488.23 ppb	11:52:42
1	Tl 190.801†	1561.2	1602.2	495.58 ug/L	495.58 ppb	11:53:07
1	U 409.014†	19290.3	20735.6	491.08 ug/L	491.08 ppb	11:52:47
1	V 292.402†	80721.1	81696.1	491.33 ug/L	491.33 ppb	11:52:47
1	Zn 213.857†	56131.2	54819.4	483.62 ug/L	483.62 ppb	11:52:47
1	SiO2†	86294.0	85334.4	5163.6 ug/L	5163.6 ppb	11:54:15
2	Sc Radial	5294.5	5294.5	97.9 %		11:51:50
2	Y RADIAL	5702.9	5702.9	97.60 %		11:51:50
2	Al 396.153Radial†	6569.8	6707.5	4829.7 ug/L	4829.7 ppb	11:51:50
2	Ca 317.933Radial†	3163.6	3213.9	5083.2 ug/L	5083.2 ppb	11:52:10
2	Fe 238.204 Radial†	581.8	584.6	5193.0 ug/L	5193.0 ppb	11:52:10
2	K 766.490 Radial†	31600.0	29903.2	5081.5 ug/L	5081.5 ppb	11:51:50
2	Mg 279.077 IEC†	152.0	153.9	5170.3 ug/L	5170.3 ppb	11:52:10
2	Na 589.592 Radial†	33801.2	35415.5	10330 ug/L	10330 ppb	11:51:50
2	Sr 421.552†	78485.6	80149.4	490.44 ug/L	490.44 ppb	11:51:50
2	Sc 361.383	958452.5	958452.5	99.584 %		11:53:13
2	Y 371.029	840785.7	840785.7	98.506 %		11:53:13
2	Ag 328.068†	124011.3	124228.4	497.43 ug/L	497.43 ppb	11:53:18
2	As 188.979†	1239.2	1278.5	502.09 ug/L	502.09 ppb	11:53:39
2	B 249.677†	23226.5	23549.3	498.09 ug/L	498.09 ppb	11:53:18
2	Ba 233.527†	65688.5	65962.9	496.73 ug/L	496.73 ppb	11:53:18
2	Be 313.107†	1441776.6	1452812.1	490.12 ug/L	490.12 ppb	11:53:13
2	Cd 226.502†	46998.1	47395.9	499.63 ug/L	499.63 ppb	11:53:18
2	Co 228.616†	24151.7	24329.0	498.16 ug/L	498.16 ppb	11:53:18
2	Cr 267.716†	47984.7	48089.0	496.68 ug/L	496.68 ppb	11:53:18
2	Cu 324.752†	189453.8	181336.9	489.84 ug/L	489.84 ppb	11:53:18
2	Mn 257.610†	456048.7	457281.5	491.20 ug/L	491.20 ppb	11:53:13
2	Mo 202.031†	7505.1	7514.4	490.73 ug/L	490.73 ppb	11:53:39
2	Ni 231.604†	20886.3	20880.6	499.02 ug/L	499.02 ppb	11:53:18
2	P 214.914†	4828.2	4600.0	2362.0 ug/L	2362.0 ppb	11:53:39
2	Pb 220.353†	4085.0	4148.5	498.68 ug/L	498.68 ppb	11:53:39
2	S 181.975 Axial†	816.2	766.3	990.03 ug/L	990.03 ppb	11:53:39
2	Sb 206.836†	1572.4	1542.1	510.04 ug/L	510.04 ppb	11:53:39
2	Se 196.026†	874.8	890.5	514.16 ug/L	514.16 ppb	11:53:39
2	Si 251.611†	87444.9	87293.3	2461.3 ug/L	2461.3 ppb	11:53:18
2	Sn 189.927†	2818.6	2823.4	490.81 ug/L	490.81 ppb	11:53:39
2	Ti 334.940†	340047.5	342376.8	488.49 ug/L	488.49 ppb	11:53:13
2	Tl 190.801†	1552.6	1608.0	497.31 ug/L	497.31 ppb	11:53:39
2	U 409.014†	19214.9	20838.3	493.49 ug/L	493.49 ppb	11:53:18
2	V 292.402†	81545.8	83270.6	500.69 ug/L	500.69 ppb	11:53:18
2	Zn 213.857†	56593.1	55802.2	492.29 ug/L	492.29 ppb	11:53:18
2	SiO2†	88125.0	87970.9	5323.5 ug/L	5323.5 ppb	11:54:20
3	Sc Radial	5400.4	5400.4	99.9 %		11:52:15
3	Y RADIAL	5831.2	5831.2	99.80 %		11:52:15

3	Al 396.153Radial†	6691.7	6697.9	4823.2 ug/L	4823.2 ppb	11:52:15
3	Ca 317.933Radial†	3171.7	3158.5	4995.7 ug/L	4995.7 ppb	11:52:35
3	Fe 238.204 Radial†	582.7	573.9	5097.3 ug/L	5097.3 ppb	11:52:35
3	K 766.490 Radial†	31852.6	29523.0	5016.9 ug/L	5016.9 ppb	11:52:15
3	Mg 279.077 IEC†	155.4	154.3	5184.2 ug/L	5184.2 ppb	11:52:35
3	Na 589.592 Radial†	34427.8	35365.9	10315 ug/L	10315 ppb	11:52:15
3	Sr 421.552†	80145.3	80239.1	490.99 ug/L	490.99 ppb	11:52:15
3	Sc 361.383	973775.2	973775.2	101.18 %		11:53:44
3	Y 371.029	855024.9	855024.9	100.17 %		11:53:44
3	Ag 328.068†	123115.9	121383.9	486.05 ug/L	486.05 ppb	11:53:50
3	As 188.979†	1235.5	1255.2	493.02 ug/L	493.02 ppb	11:54:10
3	B 249.677†	23119.3	23076.3	488.09 ug/L	488.09 ppb	11:53:50
3	Ba 233.527†	65097.5	64340.8	484.52 ug/L	484.52 ppb	11:53:50
3	Be 313.107†	1464461.5	1452451.7	490.00 ug/L	490.00 ppb	11:53:44
3	Cd 226.502†	46583.7	46243.7	487.48 ug/L	487.48 ppb	11:53:50
3	Co 228.616†	23967.3	23765.1	486.59 ug/L	486.59 ppb	11:53:50
3	Cr 267.716†	47656.7	47006.6	485.50 ug/L	485.50 ppb	11:53:50
3	Cu 324.752†	187818.7	176727.2	477.39 ug/L	477.39 ppb	11:53:50
3	Mn 257.610†	462202.6	456157.8	489.98 ug/L	489.98 ppb	11:53:44
3	Mo 202.031†	7499.4	7390.2	482.61 ug/L	482.61 ppb	11:54:10
3	Ni 231.604†	20788.2	20453.5	488.81 ug/L	488.81 ppb	11:53:50
3	P 214.914†	4801.8	4497.6	2309.8 ug/L	2309.8 ppb	11:54:10
3	Pb 220.353†	4058.4	4057.6	487.79 ug/L	487.79 ppb	11:54:10
3	S 181.975 Axial†	807.6	745.0	962.43 ug/L	962.43 ppb	11:54:10
3	Sb 206.836†	1571.6	1516.4	501.52 ug/L	501.52 ppb	11:54:10
3	Se 196.026†	877.5	879.3	507.57 ug/L	507.57 ppb	11:54:10
3	Si 251.611†	86682.0	85157.5	2401.1 ug/L	2401.1 ppb	11:53:50
3	Sn 189.927†	2818.0	2778.3	482.97 ug/L	482.97 ppb	11:54:10
3	Ti 334.940†	345132.6	342029.7	487.99 ug/L	487.99 ppb	11:53:44
3	Tl 190.801†	1538.5	1569.4	485.52 ug/L	485.52 ppb	11:54:10
3	U 409.014†	19044.8	20366.6	482.32 ug/L	482.32 ppb	11:53:50
3	V 292.402†	80933.4	81376.8	489.33 ug/L	489.33 ppb	11:53:50
3	Zn 213.857†	56262.2	54580.9	481.51 ug/L	481.51 ppb	11:53:50
3	SiO2†	87509.3	85969.9	5202.3 ug/L	5202.3 ppb	11:54:25

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	966528.9	100.42	%	0.800				0.80%
Sc Radial	5355.6	99.0	%	1.01				1.02%
Y 371.029	848111.5	99.364	%	0.8352				0.84%
Y RADIAL	5764.2	98.65	%	1.101				1.12%
Ag 328.068†	122629.3	491.03	ug/L	5.822	491.03	ppb	5.822	1.19%
QC value within limits for Ag 328.068 Recovery = 98.21%								
Al 396.153Radial†	6693.3	4819.6	ug/L	12.31	4819.6	ppb	12.31	0.26%
QC value within limits for Al 396.153Radial Recovery = 96.39%								
As 188.979†	1268.7	498.29	ug/L	4.713	498.29	ppb	4.713	0.95%
QC value within limits for As 188.979 Recovery = 99.66%								
B 249.677†	23290.4	492.62	ug/L	5.067	492.62	ppb	5.067	1.03%
QC value within limits for B 249.677 Recovery = 98.52%								
Ba 233.527†	65021.9	489.64	ug/L	6.337	489.64	ppb	6.337	1.29%
QC value within limits for Ba 233.527 Recovery = 97.93%								
Be 313.107†	1453061.2	490.20	ug/L	0.258	490.20	ppb	0.258	0.05%
QC value within limits for Be 313.107 Recovery = 98.04%								
Ca 317.933Radial†	3181.0	5031.3	ug/L	45.99	5031.3	ppb	45.99	0.91%
QC value within limits for Ca 317.933Radial Recovery = 100.63%								
Cd 226.502†	46676.5	492.05	ug/L	6.615	492.05	ppb	6.615	1.34%
QC value within limits for Cd 226.502 Recovery = 98.41%								
Co 228.616†	23982.6	491.06	ug/L	6.216	491.06	ppb	6.216	1.27%
QC value within limits for Co 228.616 Recovery = 98.21%								
Cr 267.716†	47402.1	489.59	ug/L	6.168	489.59	ppb	6.168	1.26%
QC value within limits for Cr 267.716 Recovery = 97.92%								
Cu 324.752†	179090.9	483.78	ug/L	6.232	483.78	ppb	6.232	1.29%
QC value within limits for Cu 324.752 Recovery = 96.76%								
Fe 238.204 Radial†	579.5	5147.5	ug/L	48.06	5147.5	ppb	48.06	0.93%
QC value within limits for Fe 238.204 Radial Recovery = 102.95%								
K 766.490 Radial†	29685.1	5044.5	ug/L	33.35	5044.5	ppb	33.35	0.66%
QC value within limits for K 766.490 Radial Recovery = 100.89%								
Mg 279.077 IEC†	154.4	5187.6	ug/L	19.16	5187.6	ppb	19.16	0.37%
QC value within limits for Mg 279.077 IEC Recovery = 103.75%								

Mn 257.610†	456627.4	490.49 ug/L	0.632	490.49 ppb	0.632	0.13%
QC value within limits for Mn 257.610 Recovery = 98.10%						
Mo 202.031†	7463.8	487.42 ug/L	4.260	487.42 ppb	4.260	0.87%
QC value within limits for Mo 202.031 Recovery = 97.48%						
Na 589.592 Radial†	35334.2	10306 ug/L	29.5	10306 ppb	29.5	0.29%
QC value within limits for Na 589.592 Radial Recovery = 103.06%						
Ni 231.604†	20592.8	492.14 ug/L	5.958	492.14 ppb	5.958	1.21%
QC value within limits for Ni 231.604 Recovery = 98.43%						
P 214.914†	4562.9	2343.4 ug/L	29.17	2343.4 ppb	29.17	1.24%
QC value within limits for P 214.914 Recovery = 93.74%						
Pb 220.353†	4108.9	493.93 ug/L	5.578	493.93 ppb	5.578	1.13%
QC value within limits for Pb 220.353 Recovery = 98.79%						
S 181.975 Axial†	756.1	976.77 ug/L	13.830	976.77 ppb	13.830	1.42%
QC value within limits for S 181.975 Axial Recovery = 97.68%						
Sb 206.836†	1533.3	507.10 ug/L	4.836	507.10 ppb	4.836	0.95%
QC value within limits for Sb 206.836 Recovery = 101.42%						
Se 196.026†	885.7	511.29 ug/L	3.378	511.29 ppb	3.378	0.66%
QC value within limits for Se 196.026 Recovery = 102.26%						
Si 251.611†	86083.7	2427.2 ug/L	30.93	2427.2 ppb	30.93	1.27%
QC value within limits for Si 251.611 Recovery = 97.09%						
Sn 189.927†	2804.7	487.56 ug/L	4.090	487.56 ppb	4.090	0.84%
QC value within limits for Sn 189.927 Recovery = 97.51%						
Sr 421.552†	80057.2	489.87 ug/L	1.478	489.87 ppb	1.478	0.30%
QC value within limits for Sr 421.552 Recovery = 97.97%						
Ti 334.940†	342203.3	488.24 ug/L	0.250	488.24 ppb	0.250	0.05%
QC value within limits for Ti 334.940 Recovery = 97.65%						
Tl 190.801†	1593.2	492.80 ug/L	6.363	492.80 ppb	6.363	1.29%
QC value within limits for Tl 190.801 Recovery = 98.56%						
U 409.014†	20646.8	488.96 ug/L	5.880	488.96 ppb	5.880	1.20%
QC value within limits for U 409.014 Recovery = 97.79%						
V 292.402†	82114.5	493.78 ug/L	6.063	493.78 ppb	6.063	1.23%
QC value within limits for V 292.402 Recovery = 98.76%						
Zn 213.857†	55067.5	485.81 ug/L	5.712	485.81 ppb	5.712	1.18%
QC value within limits for Zn 213.857 Recovery = 97.16%						
SiO2†	86425.1	5229.8 ug/L	83.42	5229.8 ppb	83.42	1.60%
QC value within limits for SiO2 Recovery = 97.80%						

All analyte(s) passed QC.

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/29/2010 11:56:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	6036.2	6036.2	112	%			11:58:28
1	Y RADIAL	6470.3	6470.3	110.7	%			11:58:28
1	Al 396.153Radial†	6.7	3.0	2.1362	ug/L	2.1362	ppb	11:58:48
1	Ca 317.933Radial†	15.8	-3.4	-5.3990	ug/L	-5.3990	ppb	11:58:48
1	Fe 238.204 Radial†	10.7	-0.0	-0.0610	ug/L	-0.0610	ppb	11:58:48
1	K 766.490 Radial†	2737.0	78.3	13.319	ug/L	13.319	ppb	11:58:28
1	Mg 279.077 IEC†	1.1	-0.4	-11.824	ug/L	-11.824	ppb	11:58:48
1	Na 589.592 Radial†	-905.9	78.7	22.950	ug/L	22.950	ppb	11:58:28
1	Sr 421.552†	41.6	19.9	0.1219	ug/L	0.1219	ppb	11:58:28
1	Sc 361.383	965056.9	965056.9	100.27	%			11:59:45
1	Y 371.029	857035.8	857035.8	100.41	%			11:59:45
1	Ag 328.068†	299.3	-2.8	-0.0084	ug/L	-0.0084	ppb	11:59:50
1	As 188.979†	-15.2	18.9	7.3435	ug/L	7.3435	ppb	12:00:10
1	B 249.677†	264.8	489.8	10.406	ug/L	10.406	ppb	12:00:10
1	Ba 233.527†	-4.8	-5.0	-0.0368	ug/L	-0.0368	ppb	12:00:10
1	Be 313.107†	-4895.4	125.7	0.0423	ug/L	0.0423	ppb	11:59:50
1	Cd 226.502†	-159.1	42.7	0.4503	ug/L	0.4503	ppb	12:00:10
1	Co 228.616†	-63.1	13.4	0.2759	ug/L	0.2759	ppb	12:00:10
1	Cr 267.716†	105.7	9.1	0.0955	ug/L	0.0955	ppb	12:00:10
1	Cu 324.752†	8973.1	40.0	0.1092	ug/L	0.1092	ppb	11:59:50
1	Mn 257.610†	750.7	74.9	0.0809	ug/L	0.0809	ppb	12:00:10
1	Mo 202.031†	29.2	7.1	0.4609	ug/L	0.4609	ppb	12:00:10
1	Ni 231.604†	113.7	20.4	0.4874	ug/L	0.4874	ppb	12:00:10
1	P 214.914†	246.5	-2.5	-1.3611	ug/L	-1.3611	ppb	12:00:10
1	Pb 220.353†	-17.3	29.2	3.4999	ug/L	3.4999	ppb	12:00:10
1	S 181.975 Axial†	45.3	-8.1	-10.512	ug/L	-10.512	ppb	12:00:10
1	Sb 206.836†	53.0	16.0	5.1331	ug/L	5.1331	ppb	12:00:10
1	Se 196.026†	-19.9	-7.8	-4.3613	ug/L	-4.3613	ppb	12:00:10
1	Si 251.611†	662.8	143.9	4.0605	ug/L	4.0605	ppb	12:00:10
1	Sn 189.927†	17.6	10.6	1.8329	ug/L	1.8329	ppb	12:00:10
1	Ti 334.940†	-913.5	-3.4	-0.0038	ug/L	-0.0038	ppb	11:59:50
1	Tl 190.801†	-52.5	-3.5	-1.0820	ug/L	-1.0820	ppb	12:00:10
1	U 409.014†	-1626.5	-79.0	-1.8780	ug/L	-1.8780	ppb	11:59:50
1	V 292.402†	-1333.7	53.7	0.3216	ug/L	0.3216	ppb	11:59:50
1	Zn 213.857†	1101.1	70.6	0.6254	ug/L	0.6254	ppb	12:00:10
1	SiO2†	657.0	132.7	8.0386	ug/L	8.0386	ppb	12:01:16
2	Sc Radial	5320.1	5320.1	98.4	%			11:58:53
2	Y RADIAL	5729.7	5729.7	98.06	%			11:58:53
2	Al 396.153Radial†	4.6	1.6	1.1444	ug/L	1.1444	ppb	11:59:13
2	Ca 317.933Radial†	18.3	1.0	1.5982	ug/L	1.5982	ppb	11:59:13
2	Fe 238.204 Radial†	11.9	2.5	22.343	ug/L	22.343	ppb	11:59:13
2	K 766.490 Radial†	2650.4	320.3	54.505	ug/L	54.505	ppb	11:58:53
2	Mg 279.077 IEC†	3.1	1.8	60.752	ug/L	60.752	ppb	11:59:13
2	Na 589.592 Radial†	-893.1	-17.6	-5.1191	ug/L	-5.1191	ppb	11:58:53
2	Sr 421.552†	36.1	19.3	0.1184	ug/L	0.1184	ppb	11:58:53
2	Sc 361.383	962621.8	962621.8	100.02	%			12:00:15
2	Y 371.029	854290.5	854290.5	100.09	%			12:00:15
2	Ag 328.068†	370.6	69.2	0.2829	ug/L	0.2829	ppb	12:00:20
2	As 188.979†	-9.4	24.7	9.6223	ug/L	9.6223	ppb	12:00:40
2	B 249.677†	252.5	478.2	10.156	ug/L	10.156	ppb	12:00:40
2	Ba 233.527†	-2.8	-3.0	-0.0221	ug/L	-0.0221	ppb	12:00:40
2	Be 313.107†	-4913.7	95.1	0.0319	ug/L	0.0319	ppb	12:00:20
2	Cd 226.502†	-170.8	30.6	0.3206	ug/L	0.3206	ppb	12:00:40
2	Co 228.616†	-73.2	3.1	0.0639	ug/L	0.0639	ppb	12:00:40
2	Cr 267.716†	95.0	-1.3	-0.0127	ug/L	-0.0127	ppb	12:00:40
2	Cu 324.752†	8953.2	42.8	0.1173	ug/L	0.1173	ppb	12:00:20
2	Mn 257.610†	736.1	62.1	0.0664	ug/L	0.0664	ppb	12:00:40
2	Mo 202.031†	26.9	4.9	0.3199	ug/L	0.3199	ppb	12:00:40
2	Ni 231.604†	99.7	6.6	0.1584	ug/L	0.1584	ppb	12:00:40

2	P 214.914†	249.4	1.0	0.5034	ug/L	0.5034	ppb	12:00:40
2	Pb 220.353†	-11.0	35.4	4.2405	ug/L	4.2405	ppb	12:00:40
2	S 181.975 Axial†	46.6	-6.7	-8.7076	ug/L	-8.7076	ppb	12:00:40
2	Sb 206.836†	47.9	11.0	3.5456	ug/L	3.5456	ppb	12:00:40
2	Se 196.026†	-17.3	-5.3	-2.8694	ug/L	-2.8694	ppb	12:00:40
2	Si 251.611†	641.6	124.3	3.5096	ug/L	3.5096	ppb	12:00:40
2	Sn 189.927†	21.1	14.1	2.4461	ug/L	2.4461	ppb	12:00:40
2	Ti 334.940†	-933.4	-25.6	-0.0408	ug/L	-0.0408	ppb	12:00:20
2	Tl 190.801†	-39.9	9.0	2.7685	ug/L	2.7685	ppb	12:00:40
2	U 409.014†	-1589.2	-45.9	-1.0934	ug/L	-1.0934	ppb	12:00:20
2	V 292.402†	-1401.1	-17.0	-0.1003	ug/L	-0.1003	ppb	12:00:20
2	Zn 213.857†	1070.7	43.0	0.3798	ug/L	0.3798	ppb	12:00:40
2	SiO2†	630.1	107.5	6.5107	ug/L	6.5107	ppb	12:01:21
3	Sc Radial	5439.0	5439.0	101	%			11:59:18
3	Y RADIAL	5899.0	5899.0	101.0	%			11:59:18
3	Al 396.153Radial†	1.9	-1.2	-0.8749	ug/L	-0.8749	ppb	11:59:38
3	Ca 317.933Radial†	17.3	-0.4	-0.5620	ug/L	-0.5620	ppb	11:59:38
3	Fe 238.204 Radial†	10.9	1.3	11.095	ug/L	11.095	ppb	11:59:38
3	K 766.490 Radial†	2806.2	416.4	70.847	ug/L	70.847	ppb	11:59:18
3	Mg 279.077 IEC†	-0.6	-1.9	-62.852	ug/L	-62.852	ppb	11:59:38
3	Na 589.592 Radial†	-910.1	-14.6	-4.2595	ug/L	-4.2595	ppb	11:59:18
3	Sr 421.552†	-9.6	-26.9	-0.1644	ug/L	-0.1644	ppb	11:59:18
3	Sc 361.383	967703.1	967703.1	100.54	%			12:00:45
3	Y 371.029	858469.3	858469.3	100.58	%			12:00:45
3	Ag 328.068†	449.2	145.5	0.5800	ug/L	0.5800	ppb	12:00:51
3	As 188.979†	-10.0	24.1	9.3728	ug/L	9.3728	ppb	12:01:11
3	B 249.677†	214.9	439.4	9.3338	ug/L	9.3338	ppb	12:01:11
3	Ba 233.527†	6.6	6.4	0.0474	ug/L	0.0474	ppb	12:01:11
3	Be 313.107†	-4928.1	106.5	0.0361	ug/L	0.0361	ppb	12:00:51
3	Cd 226.502†	-164.2	38.0	0.4003	ug/L	0.4003	ppb	12:01:11
3	Co 228.616†	-58.3	18.4	0.3768	ug/L	0.3768	ppb	12:01:11
3	Cr 267.716†	97.0	0.2	0.0011	ug/L	0.0011	ppb	12:01:11
3	Cu 324.752†	8930.1	-27.2	-0.0734	ug/L	-0.0734	ppb	12:00:51
3	Mn 257.610†	717.0	39.3	0.0458	ug/L	0.0458	ppb	12:01:11
3	Mo 202.031†	27.9	5.7	0.3729	ug/L	0.3729	ppb	12:01:11
3	Ni 231.604†	99.5	5.9	0.1419	ug/L	0.1419	ppb	12:01:11
3	P 214.914†	235.5	-14.2	-7.5673	ug/L	-7.5673	ppb	12:01:11
3	Pb 220.353†	-9.0	37.4	4.4861	ug/L	4.4861	ppb	12:01:11
3	S 181.975 Axial†	47.9	-5.6	-7.2402	ug/L	-7.2402	ppb	12:01:11
3	Sb 206.836†	54.0	16.8	5.3933	ug/L	5.3933	ppb	12:01:11
3	Se 196.026†	-18.4	-6.2	-3.4183	ug/L	-3.4183	ppb	12:01:11
3	Si 251.611†	661.0	140.2	3.9591	ug/L	3.9591	ppb	12:01:11
3	Sn 189.927†	14.7	7.7	1.3356	ug/L	1.3356	ppb	12:01:11
3	Ti 334.940†	-849.5	62.8	0.0943	ug/L	0.0943	ppb	12:00:51
3	Tl 190.801†	-42.3	6.8	2.0890	ug/L	2.0890	ppb	12:01:11
3	U 409.014†	-1513.6	37.6	0.8928	ug/L	0.8928	ppb	12:00:51
3	V 292.402†	-1457.1	-65.4	-0.3838	ug/L	-0.3838	ppb	12:00:51
3	Zn 213.857†	1069.8	36.5	0.3231	ug/L	0.3231	ppb	12:01:11
3	SiO2†	680.7	154.5	9.3605	ug/L	9.3605	ppb	12:01:26

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	965127.2	100.28	%	0.264				0.26%
Sc Radial	5598.4	104	%	7.1				6.85%
Y 371.029	856598.5	100.36	%	0.249				0.25%
Y RADIAL	6033.0	103.3	%	6.64				6.43%
Ag 328.068†	70.6	0.2848	ug/L	0.29420	0.2848	ppb	0.29420	103.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.1	0.8019	ug/L	1.53448	0.8019	ppb	1.53448	191.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	22.5	8.7795	ug/L	1.24992	8.7795	ppb	1.24992	14.24%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	469.1	9.9651	ug/L	0.56081	9.9651	ppb	0.56081	5.63%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.5	-0.0039	ug/L	0.04498	-0.0039	ppb	0.04498	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	109.1	0.0368	ug/L	0.00523	0.0368	ppb	0.00523	14.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.9	-1.4542	ug/L	3.58293	-1.4542	ppb	3.58293	246.38%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              37.1      0.3904 ug/L       0.06542      0.3904 ppb        0.06542  16.76%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              11.6      0.2389 ug/L       0.15966      0.2389 ppb        0.15966  66.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               2.7      0.0280 ug/L       0.05889      0.0280 ppb        0.05889 210.53%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              18.5      0.0511 ug/L       0.10784      0.0511 ppb        0.10784 211.20%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        1.3      11.126 ug/L       11.2020      11.126 ppb        11.2020 100.69%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       271.7      46.224 ug/L       29.6450      46.224 ppb        29.6450  64.13%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.1     -4.6412 ug/L      62.11414     -4.6412 ppb       62.11414 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              58.8      0.0644 ug/L       0.01761      0.0644 ppb        0.01761  27.35%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               5.9      0.3846 ug/L       0.07119      0.3846 ppb        0.07119  18.51%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       15.5      4.5237 ug/L      15.96304      4.5237 ppb       15.96304 352.88%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              11.0      0.2626 ug/L       0.19489      0.2626 ppb        0.19489  74.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -5.3     -2.8083 ug/L       4.22552     -2.8083 ppb        4.22552 150.46%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              34.0      4.0755 ug/L       0.51341      4.0755 ppb        0.51341  12.60%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -6.8     -8.8200 ug/L       1.63887     -8.8200 ppb        1.63887  18.58%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              14.6      4.6907 ug/L       1.00015      4.6907 ppb        1.00015  21.32%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -6.5     -3.5497 ug/L       0.75456     -3.5497 ppb        0.75456  21.26%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             136.1      3.8431 ug/L       0.29320      3.8431 ppb        0.29320   7.63%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              10.8      1.8715 ug/L       0.55623      1.8715 ppb        0.55623  29.72%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               4.1      0.0253 ug/L       0.16432      0.0253 ppb        0.16432 649.88%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              11.3      0.0166 ug/L       0.06982      0.0166 ppb        0.06982 420.98%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.1      1.2585 ug/L       2.05521      1.2585 ppb        2.05521 163.31%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -29.1     -0.6929 ug/L       1.42813     -0.6929 ppb        1.42813 206.12%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -9.5     -0.0542 ug/L       0.35495     -0.0542 ppb        0.35495 655.38%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              50.1      0.4427 ug/L       0.16069      0.4427 ppb        0.16069  36.29%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   131.5      7.9700 ug/L       1.42615      7.9700 ppb        1.42615  17.89%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: LR1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 1/29/2010 12:03:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5340.9	5340.9	98.8	%			12:05:30
1	Y RADIAL	5736.5	5736.5	98.18	%			12:05:30
1	Al 396.153Radial†	-17.6	-20.8	-13.888	ug/L	-13.888	ppb	12:05:50
1	Ca 317.933Radial†	33.3	16.2	25.621	ug/L	25.621	ppb	12:05:50
1	Fe 238.204 Radial†	42490.1	43013.7	380980	ug/L	380980	ppb	12:05:30
1	K 766.490 Radial†	2338.8	-5.6	-0.9213	ug/L	-0.9213	ppb	12:05:30
1	Mg 279.077 IEC†	13.9	12.8	30.706	ug/L	30.706	ppb	12:05:50
1	Na 589.592 Radial†	-872.0	7.4	2.1580	ug/L	2.1580	ppb	12:05:30
1	Sr 421.552†	92.5	76.3	0.4665	ug/L	0.4665	ppb	12:05:30
1	Sc 361.383	957386.1	957386.1	99.473	%			12:06:48
1	Y 371.029	844371.8	844371.8	98.926	%			12:06:48
1	Ag 328.068†	-28893.8	-29348.3	6.7985	ug/L	6.7985	ppb	12:06:48
1	As 188.979†	-203.6	-170.6	22.858	ug/L	22.858	ppb	12:07:08
1	B 249.677†	2803.1	3043.6	2.7845	ug/L	2.7845	ppb	12:06:48
1	Ba 233.527†	-1785.5	-1795.1	-1.7680	ug/L	-1.7680	ppb	12:06:48
1	Be 313.107†	-4906.8	75.1	0.0251	ug/L	0.0251	ppb	12:06:48
1	Cd 226.502†	3594.2	3814.6	0.8830	ug/L	0.8830	ppb	12:06:48
1	Co 228.616†	184.1	261.4	-0.2097	ug/L	-0.2097	ppb	12:07:08
1	Cr 267.716†	-548.9	-648.1	0.7740	ug/L	0.7740	ppb	12:06:48
1	Cu 324.752†	2199.9	-6697.4	2.0393	ug/L	2.0393	ppb	12:06:48
1	Mn 257.610†	-36965.4	-37835.1	-3.0066	ug/L	-3.0066	ppb	12:06:48
1	Mo 202.031†	-347.8	-371.7	5.3267	ug/L	5.3267	ppb	12:06:48
1	Ni 231.604†	131.1	38.8	0.9242	ug/L	0.9242	ppb	12:07:08
1	P 214.914†	749.3	504.8	-33.578	ug/L	-33.578	ppb	12:07:08
1	Pb 220.353†	254.5	302.3	-0.2305	ug/L	-0.2305	ppb	12:07:08
1	S 181.975 Axial†	60.4	7.4	9.5610	ug/L	9.5610	ppb	12:07:08
1	Sb 206.836†	27.2	-9.6	6.1165	ug/L	6.1165	ppb	12:07:08
1	Se 196.026†	-1879.5	-1877.4	215.79	ug/L	215.79	ppb	12:07:08
1	Si 251.611†	-620.0	-1140.5	-31.939	ug/L	-31.939	ppb	12:06:48
1	Sn 189.927†	-21.2	-28.3	1.5088	ug/L	1.5088	ppb	12:07:08
1	Ti 334.940†	-955.9	-53.3	-0.1325	ug/L	-0.1325	ppb	12:06:48
1	Tl 190.801†	-48.6	-0.0	-0.3303	ug/L	-0.3303	ppb	12:07:08
1	U 409.014†	1054.1	2602.7	18.433	ug/L	18.433	ppb	12:06:48
1	V 292.402†	8127.3	9554.2	0.9999	ug/L	0.9999	ppb	12:06:48
1	Zn 213.857†	4834.1	3832.2	-2.8314	ug/L	-2.8314	ppb	12:07:08
1	SiO2†	-502.1	-1027.3	-61.661	ug/L	-61.661	ppb	12:08:05
2	Sc Radial	5430.0	5430.0	100	%			12:05:55
2	Y RADIAL	5849.5	5849.5	100.1	%			12:05:55
2	Al 396.153Radial†	-13.0	-16.0	-10.384	ug/L	-10.384	ppb	12:06:15
2	Ca 317.933Radial†	24.9	7.2	11.401	ug/L	11.401	ppb	12:06:15
2	Fe 238.204 Radial†	43010.4	42825.9	379310	ug/L	379310	ppb	12:05:55
2	K 766.490 Radial†	2334.4	-48.9	-8.2884	ug/L	-8.2884	ppb	12:05:55
2	Mg 279.077 IEC†	11.0	9.7	-72.184	ug/L	-72.184	ppb	12:06:15
2	Na 589.592 Radial†	-816.3	77.3	22.556	ug/L	22.556	ppb	12:05:55
2	Sr 421.552†	104.2	86.4	0.5288	ug/L	0.5288	ppb	12:05:55
2	Sc 361.383	943393.4	943393.4	98.019	%			12:07:14
2	Y 371.029	832928.3	832928.3	97.585	%			12:07:14
2	Ag 328.068†	-28464.3	-29340.9	6.2857	ug/L	6.2857	ppb	12:07:14
2	As 188.979†	-210.0	-180.2	18.738	ug/L	18.738	ppb	12:07:34
2	B 249.677†	2815.2	3097.7	4.2035	ug/L	4.2035	ppb	12:07:14
2	Ba 233.527†	-1780.7	-1816.9	-1.9846	ug/L	-1.9846	ppb	12:07:14
2	Be 313.107†	-4930.8	-22.5	-0.0081	ug/L	-0.0081	ppb	12:07:14
2	Cd 226.502†	3494.9	3766.9	0.5524	ug/L	0.5524	ppb	12:07:14
2	Co 228.616†	199.7	280.1	0.1947	ug/L	0.1947	ppb	12:07:34
2	Cr 267.716†	-489.3	-595.5	1.2831	ug/L	1.2831	ppb	12:07:14
2	Cu 324.752†	2180.9	-6683.9	1.9881	ug/L	1.9881	ppb	12:07:14
2	Mn 257.610†	-36221.7	-37627.6	-2.9439	ug/L	-2.9439	ppb	12:07:14
2	Mo 202.031†	-351.9	-381.1	4.5803	ug/L	4.5803	ppb	12:07:14
2	Ni 231.604†	181.4	92.0	2.1969	ug/L	2.1969	ppb	12:07:34

2	P 214.914†	745.0	511.7	-28.610 ug/L	-28.610 ppb	12:07:34
2	Pb 220.353†	245.8	297.2	-0.6776 ug/L	-0.6776 ppb	12:07:34
2	S 181.975 Axial†	55.1	2.9	3.7954 ug/L	3.7954 ppb	12:07:34
2	Sb 206.836†	13.4	-23.2	1.6866 ug/L	1.6866 ppb	12:07:34
2	Se 196.026†	-1862.7	-1888.3	204.21 ug/L	204.21 ppb	12:07:34
2	Si 251.611†	-645.3	-1175.6	-32.922 ug/L	-32.922 ppb	12:07:14
2	Sn 189.927†	-28.6	-36.1	0.1148 ug/L	0.1148 ppb	12:07:34
2	Ti 334.940†	-1061.8	-175.6	-0.3001 ug/L	-0.3001 ppb	12:07:14
2	Tl 190.801†	-42.5	5.5	1.3583 ug/L	1.3583 ppb	12:07:34
2	U 409.014†	1003.3	2566.6	17.763 ug/L	17.763 ppb	12:07:14
2	V 292.402†	7825.7	9367.7	0.1228 ug/L	0.1228 ppb	12:07:14
2	Zn 213.857†	4796.4	3865.9	-2.3789 ug/L	-2.3789 ppb	12:07:34
2	SiO2†	-542.7	-1076.2	-64.612 ug/L	-64.612 ppb	12:08:10
3	Sc Radial	5305.7	5305.7	98.1 %		12:06:20
3	Y RADIAL	5716.5	5716.5	97.84 %		12:06:20
3	Al 396.153Radial†	-14.0	-17.3	-11.433 ug/L	-11.433 ppb	12:06:40
3	Ca 317.933Radial†	18.9	1.7	2.7362 ug/L	2.7362 ppb	12:06:40
3	Fe 238.204 Radial†	42295.0	43099.8	381740 ug/L	381740 ppb	12:06:20
3	K 766.490 Radial†	2233.6	-97.2	-16.488 ug/L	-16.488 ppb	12:06:20
3	Mg 279.077 IEC†	12.1	11.0	-30.279 ug/L	-30.279 ppb	12:06:40
3	Na 589.592 Radial†	-921.9	-49.4	-14.400 ug/L	-14.400 ppb	12:06:20
3	Sr 421.552†	93.3	77.7	0.4757 ug/L	0.4757 ppb	12:06:20
3	Sc 361.383	947033.4	947033.4	98.397 %		12:07:40
3	Y 371.029	836726.2	836726.2	98.030 %		12:07:40
3	Ag 328.068†	-28467.5	-29232.6	7.5003 ug/L	7.5003 ppb	12:07:40
3	As 188.979†	-211.1	-180.5	19.193 ug/L	19.193 ppb	12:08:00
3	B 249.677†	2841.9	3113.8	4.1509 ug/L	4.1509 ppb	12:07:40
3	Ba 233.527†	-1819.6	-1849.4	-2.1561 ug/L	-2.1561 ppb	12:07:40
3	Be 313.107†	-4857.3	71.5	0.0237 ug/L	0.0237 ppb	12:07:40
3	Cd 226.502†	3533.9	3792.9	0.5746 ug/L	0.5746 ppb	12:07:40
3	Co 228.616†	211.6	291.4	0.3958 ug/L	0.3958 ppb	12:08:00
3	Cr 267.716†	-567.6	-673.2	0.5286 ug/L	0.5286 ppb	12:07:40
3	Cu 324.752†	2106.3	-6768.3	1.8886 ug/L	1.8886 ppb	12:07:40
3	Mn 257.610†	-36567.5	-37836.9	-2.9309 ug/L	-2.9309 ppb	12:07:40
3	Mo 202.031†	-326.2	-353.5	6.5685 ug/L	6.5685 ppb	12:07:40
3	Ni 231.604†	145.1	54.5	1.2986 ug/L	1.2986 ppb	12:08:00
3	P 214.914†	744.5	508.2	-32.348 ug/L	-32.348 ppb	12:08:00
3	Pb 220.353†	243.4	293.8	-1.3166 ug/L	-1.3166 ppb	12:08:00
3	S 181.975 Axial†	61.1	8.8	11.356 ug/L	11.356 ppb	12:08:00
3	Sb 206.836†	20.0	-16.6	3.8954 ug/L	3.8954 ppb	12:08:00
3	Se 196.026†	-1888.5	-1907.2	201.73 ug/L	201.73 ppb	12:08:00
3	Si 251.611†	-502.9	-1028.3	-28.780 ug/L	-28.780 ppb	12:07:40
3	Sn 189.927†	-28.0	-35.4	0.2829 ug/L	0.2829 ppb	12:08:00
3	Ti 334.940†	-997.6	-106.2	-0.2055 ug/L	-0.2055 ppb	12:07:40
3	Tl 190.801†	-51.1	-3.1	-1.2712 ug/L	-1.2712 ppb	12:08:00
3	U 409.014†	993.9	2553.2	17.169 ug/L	17.169 ppb	12:07:40
3	V 292.402†	7763.3	9273.6	-0.7632 ug/L	-0.7632 ppb	12:07:40
3	Zn 213.857†	4810.7	3861.6	-2.6460 ug/L	-2.6460 ppb	12:08:00
3	SiO2†	-475.8	-1006.1	-60.407 ug/L	-60.407 ppb	12:08:15

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	949271.0	98.630	%	0.7543				0.76%
Sc Radial	5358.9	99.1	%	1.18				1.20%
Y 371.029	838008.8	98.180	%	0.6829				0.70%
Y RADIAL	5767.5	98.71	%	1.228				1.24%
Ag 328.068†	-29307.3	6.8615	ug/L	0.60974	6.8615	ppb	0.60974	8.89%
Al 396.153Radial†	-18.1	-11.902	ug/L	1.7988	-11.902	ppb	1.7988	15.11%
As 188.979†	-177.1	20.263	ug/L	2.2588	20.263	ppb	2.2588	11.15%
B 249.677†	3085.1	3.7130	ug/L	0.80451	3.7130	ppb	0.80451	21.67%
Ba 233.527†	-1820.5	-1.9696	ug/L	0.19447	-1.9696	ppb	0.19447	9.87%
Be 313.107†	41.4	0.0136	ug/L	0.01882	0.0136	ppb	0.01882	138.64%
Ca 317.933Radial†	8.4	13.253	ug/L	11.5544	13.253	ppb	11.5544	87.18%
Cd 226.502†	3791.5	0.6700	ug/L	0.18480	0.6700	ppb	0.18480	27.58%
Co 228.616†	277.7	0.1269	ug/L	0.30837	0.1269	ppb	0.30837	242.96%
Cr 267.716†	-638.9	0.8619	ug/L	0.38485	0.8619	ppb	0.38485	44.65%
Cu 324.752†	-6716.6	1.9720	ug/L	0.07661	1.9720	ppb	0.07661	3.89%
Fe 238.204 Radial†	42979.8	380680	ug/L	1240.4	380680	ppb	1240.4	0.33%
K 766.490 Radial†	-50.6	-8.5658	ug/L	7.78691	-8.5658	ppb	7.78691	90.91%

Mg 279.077 IEC†	11.1	-23.919	ug/L	51.7389	-23.919	ppb	51.7389 216.31%
Mn 257.610†	-37766.5	-2.9605	ug/L	0.04051	-2.9605	ppb	0.04051 1.37%
Mo 202.031†	-368.8	5.4918	ug/L	1.00430	5.4918	ppb	1.00430 18.29%
Na 589.592 Radial†	11.8	3.4378	ug/L	18.51113	3.4378	ppb	18.51113 538.46%
Ni 231.604†	61.8	1.4732	ug/L	0.65404	1.4732	ppb	0.65404 44.40%
P 214.914†	508.3	-31.512	ug/L	2.5876	-31.512	ppb	2.5876 8.21%
Pb 220.353†	297.8	-0.7416	ug/L	0.54588	-0.7416	ppb	0.54588 73.61%
S 181.975 Axial†	6.4	8.2374	ug/L	3.95012	8.2374	ppb	3.95012 47.95%
Sb 206.836†	-16.5	3.8995	ug/L	2.21492	3.8995	ppb	2.21492 56.80%
Se 196.026†	-1891.0	207.24	ug/L	7.507	207.24	ppb	7.507 3.62%
Si 251.611†	-1114.8	-31.214	ug/L	2.1638	-31.214	ppb	2.1638 6.93%
Sn 189.927†	-33.3	0.6355	ug/L	0.76094	0.6355	ppb	0.76094 119.74%
Sr 421.552†	80.1	0.4903	ug/L	0.03359	0.4903	ppb	0.03359 6.85%
Ti 334.940†	-111.7	-0.2127	ug/L	0.08405	-0.2127	ppb	0.08405 39.52%
Tl 190.801†	0.8	-0.0811	ug/L	1.33234	-0.0811	ppb	1.33234 >999.9%
U 409.014†	2574.2	17.788	ug/L	0.6324	17.788	ppb	0.6324 3.56%
V 292.402†	9398.5	0.1198	ug/L	0.88152	0.1198	ppb	0.88152 735.62%
Zn 213.857†	3853.2	-2.6187	ug/L	0.22748	-2.6187	ppb	0.22748 8.69%
SiO2†	-1036.5	-62.226	ug/L	2.1587	-62.226	ppb	2.1587 3.47%

Sequence No.: 4
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/29/2010 12:10:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5393.4	5393.4	99.7	%			12:12:19
1	Y RADIAL	5781.2	5781.2	98.95	%			12:12:19
1	Al 396.153Radial†	6659.1	6674.0	4805.6	ug/L	4805.6	ppb	12:12:19
1	Ca 317.933Radial†	3187.2	3178.2	5026.8	ug/L	5026.8	ppb	12:12:39
1	Fe 238.204 Radial†	596.4	588.4	5226.3	ug/L	5226.3	ppb	12:12:39
1	K 766.490 Radial†	31857.6	29569.7	5024.8	ug/L	5024.8	ppb	12:12:19
1	Mg 279.077 IEC†	155.5	154.6	5193.4	ug/L	5193.4	ppb	12:12:39
1	Na 589.592 Radial†	34808.3	35792.4	10440	ug/L	10440	ppb	12:12:19
1	Sr 421.552†	80297.8	80496.8	492.56	ug/L	492.56	ppb	12:12:19
1	Sc 361.383	968523.5	968523.5	100.63	%			12:13:36
1	Y 371.029	850361.1	850361.1	99.627	%			12:13:36
1	Ag 328.068†	123970.9	122893.3	492.12	ug/L	492.12	ppb	12:13:42
1	As 188.979†	1241.9	1268.2	498.00	ug/L	498.00	ppb	12:14:02
1	B 249.677†	23073.5	23154.7	489.72	ug/L	489.72	ppb	12:13:42
1	Ba 233.527†	65769.6	65357.7	492.17	ug/L	492.17	ppb	12:13:42
1	Be 313.107†	1462746.1	1458595.6	492.04	ug/L	492.04	ppb	12:13:36
1	Cd 226.502†	46989.1	46896.2	494.36	ug/L	494.36	ppb	12:13:42
1	Co 228.616†	24168.1	24093.1	493.35	ug/L	493.35	ppb	12:13:42
1	Cr 267.716†	48059.7	47662.5	492.28	ug/L	492.28	ppb	12:13:42
1	Cu 324.752†	189467.8	179372.6	484.54	ug/L	484.54	ppb	12:13:42
1	Mn 257.610†	462235.2	458667.3	492.69	ug/L	492.69	ppb	12:13:36
1	Mo 202.031†	7554.6	7485.2	488.82	ug/L	488.82	ppb	12:14:02
1	Ni 231.604†	20933.4	20709.3	494.92	ug/L	494.92	ppb	12:13:42
1	P 214.914†	4863.8	4585.0	2355.0	ug/L	2355.0	ppb	12:14:02
1	Pb 220.353†	4087.5	4108.3	493.85	ug/L	493.85	ppb	12:14:02
1	S 181.975 Axial†	809.8	751.5	970.85	ug/L	970.85	ppb	12:14:02
1	Sb 206.836†	1554.6	1508.0	499.01	ug/L	499.01	ppb	12:14:02
1	Se 196.026†	868.2	874.8	505.49	ug/L	505.49	ppb	12:14:02
1	Si 251.611†	87505.8	86440.7	2437.3	ug/L	2437.3	ppb	12:13:42
1	Sn 189.927†	2805.2	2780.7	483.39	ug/L	483.39	ppb	12:14:02
1	Ti 334.940†	335876.6	334681.3	477.50	ug/L	477.50	ppb	12:13:42
1	Tl 190.801†	1557.2	1596.3	493.65	ug/L	493.65	ppb	12:14:02
1	U 409.014†	19234.3	20657.0	489.19	ug/L	489.19	ppb	12:13:42
1	V 292.402†	81743.8	82615.9	496.78	ug/L	496.78	ppb	12:13:42
1	Zn 213.857†	56708.8	55326.2	488.08	ug/L	488.08	ppb	12:13:42
1	SiO2†	87025.5	85958.1	5201.5	ug/L	5201.5	ppb	12:15:09
2	Sc Radial	5359.9	5359.9	99.1	%			12:12:44
2	Y RADIAL	5793.9	5793.9	99.16	%			12:12:44
2	Al 396.153Radial†	6667.8	6724.5	4842.1	ug/L	4842.1	ppb	12:12:44
2	Ca 317.933Radial†	3187.6	3198.6	5059.0	ug/L	5059.0	ppb	12:13:04
2	Fe 238.204 Radial†	589.1	584.8	5194.4	ug/L	5194.4	ppb	12:13:04
2	K 766.490 Radial†	31800.4	29711.5	5048.9	ug/L	5048.9	ppb	12:12:44
2	Mg 279.077 IEC†	152.7	152.8	5130.9	ug/L	5130.9	ppb	12:13:04
2	Na 589.592 Radial†	34606.8	35807.1	10444	ug/L	10444	ppb	12:12:44
2	Sr 421.552†	79986.6	80685.7	493.72	ug/L	493.72	ppb	12:12:44
2	Sc 361.383	963967.8	963967.8	100.16	%			12:14:07
2	Y 371.029	845286.1	845286.1	99.033	%			12:14:07
2	Ag 328.068†	124180.5	123684.9	495.25	ug/L	495.25	ppb	12:14:13
2	As 188.979†	1231.6	1263.7	496.28	ug/L	496.28	ppb	12:14:33
2	B 249.677†	23031.2	23220.9	491.13	ug/L	491.13	ppb	12:14:13
2	Ba 233.527†	65581.2	65478.4	493.08	ug/L	493.08	ppb	12:14:13
2	Be 313.107†	1456430.2	1459159.3	492.23	ug/L	492.23	ppb	12:14:07
2	Cd 226.502†	46718.4	46846.7	493.84	ug/L	493.84	ppb	12:14:13
2	Co 228.616†	24022.2	24061.0	492.68	ug/L	492.68	ppb	12:14:13
2	Cr 267.716†	47844.1	47672.9	492.38	ug/L	492.38	ppb	12:14:13
2	Cu 324.752†	190336.9	181130.1	489.28	ug/L	489.28	ppb	12:14:13
2	Mn 257.610†	460161.7	458767.8	492.80	ug/L	492.80	ppb	12:14:07
2	Mo 202.031†	7488.9	7455.1	486.86	ug/L	486.86	ppb	12:14:33
2	Ni 231.604†	20843.2	20717.5	495.12	ug/L	495.12	ppb	12:14:13

2	P 214.914†	4815.0	4559.1	2340.2 ug/L	2340.2 ppb	12:14:33
2	Pb 220.353†	4036.3	4076.4	490.04 ug/L	490.04 ppb	12:14:33
2	S 181.975 Axial†	809.9	755.3	975.82 ug/L	975.82 ppb	12:14:33
2	Sb 206.836†	1548.1	1508.7	499.25 ug/L	499.25 ppb	12:14:33
2	Se 196.026†	868.3	879.0	507.74 ug/L	507.74 ppb	12:14:33
2	Si 251.611†	87451.0	86797.0	2447.3 ug/L	2447.3 ppb	12:14:13
2	Sn 189.927†	2806.2	2794.9	485.86 ug/L	485.86 ppb	12:14:33
2	Ti 334.940†	335797.1	336179.4	479.65 ug/L	479.65 ppb	12:14:13
2	Tl 190.801†	1544.1	1590.6	491.92 ug/L	491.92 ppb	12:14:33
2	U 409.014†	19416.8	20929.5	495.67 ug/L	495.67 ppb	12:14:13
2	V 292.402†	81407.8	82664.3	497.05 ug/L	497.05 ppb	12:14:13
2	Zn 213.857†	56488.8	55372.9	488.50 ug/L	488.50 ppb	12:14:13
2	SiO2†	87023.5	86364.8	5226.2 ug/L	5226.2 ppb	12:15:14
3	Sc Radial	5367.8	5367.8	99.3 %		12:13:09
3	Y RADIAL	5778.1	5778.1	98.89 %		12:13:09
3	Al 396.153Radial†	6649.6	6696.3	4821.7 ug/L	4821.7 ppb	12:13:09
3	Ca 317.933Radial†	3172.9	3179.1	5028.2 ug/L	5028.2 ppb	12:13:29
3	Fe 238.204 Radial†	590.4	585.2	5198.2 ug/L	5198.2 ppb	12:13:29
3	K 766.490 Radial†	31741.9	29605.4	5030.9 ug/L	5030.9 ppb	12:13:09
3	Mg 279.077 IEC†	157.9	157.8	5300.3 ug/L	5300.3 ppb	12:13:29
3	Na 589.592 Radial†	34472.5	35620.5	10389 ug/L	10389 ppb	12:13:09
3	Sr 421.552†	79800.9	80380.1	491.85 ug/L	491.85 ppb	12:13:09
3	Sc 361.383	965712.8	965712.8	100.34 %		12:14:38
3	Y 371.029	847773.5	847773.5	99.324 %		12:14:38
3	Ag 328.068†	124030.5	123311.3	493.77 ug/L	493.77 ppb	12:14:44
3	As 188.979†	1235.5	1265.4	496.94 ug/L	496.94 ppb	12:15:04
3	B 249.677†	23069.7	23217.6	491.06 ug/L	491.06 ppb	12:14:44
3	Ba 233.527†	65646.5	65425.2	492.68 ug/L	492.68 ppb	12:14:44
3	Be 313.107†	1458180.9	1458276.3	491.94 ug/L	491.94 ppb	12:14:38
3	Cd 226.502†	46850.4	46893.9	494.33 ug/L	494.33 ppb	12:14:44
3	Co 228.616†	24144.6	24139.6	494.29 ug/L	494.29 ppb	12:14:44
3	Cr 267.716†	47948.9	47691.0	492.57 ug/L	492.57 ppb	12:14:44
3	Cu 324.752†	190663.4	181112.1	489.24 ug/L	489.24 ppb	12:14:44
3	Mn 257.610†	460303.6	458079.0	492.05 ug/L	492.05 ppb	12:14:38
3	Mo 202.031†	7535.7	7488.3	489.02 ug/L	489.02 ppb	12:15:04
3	Ni 231.604†	20779.7	20616.6	492.71 ug/L	492.71 ppb	12:14:44
3	P 214.914†	4855.5	4590.7	2357.1 ug/L	2357.1 ppb	12:15:04
3	Pb 220.353†	4059.8	4092.5	491.97 ug/L	491.97 ppb	12:15:04
3	S 181.975 Axial†	803.7	747.8	966.02 ug/L	966.02 ppb	12:15:04
3	Sb 206.836†	1556.3	1514.2	501.02 ug/L	501.02 ppb	12:15:04
3	Se 196.026†	865.6	874.7	505.37 ug/L	505.37 ppb	12:15:04
3	Si 251.611†	87478.0	86666.0	2443.6 ug/L	2443.6 ppb	12:14:44
3	Sn 189.927†	2807.6	2791.1	485.21 ug/L	485.21 ppb	12:15:04
3	Ti 334.940†	336604.3	336378.0	479.91 ug/L	479.91 ppb	12:14:44
3	Tl 190.801†	1549.4	1593.1	492.68 ug/L	492.68 ppb	12:15:04
3	U 409.014†	19359.5	20837.3	493.48 ug/L	493.48 ppb	12:14:44
3	V 292.402†	81555.6	82664.8	497.08 ug/L	497.08 ppb	12:14:44
3	Zn 213.857†	56480.0	55262.2	487.53 ug/L	487.53 ppb	12:14:44
3	SiO2†	86250.5	85437.4	5169.9 ug/L	5169.9 ppb	12:15:19

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	966068.0	100.37	%	0.239				0.24%
Sc Radial	5373.7	99.4	%	0.32				0.33%
Y 371.029	847806.9	99.328	%	0.2973				0.30%
Y RADIAL	5784.4	99.00	%	0.143				0.14%
Ag 328.068†	123296.5	493.71	ug/L	1.568	493.71	ppb	1.568	0.32%
QC value within limits for Ag 328.068 Recovery = 98.74%								
Al 396.153Radial†	6698.3	4823.1	ug/L	18.33	4823.1	ppb	18.33	0.38%
QC value within limits for Al 396.153Radial Recovery = 96.46%								
As 188.979†	1265.7	497.07	ug/L	0.871	497.07	ppb	0.871	0.18%
QC value within limits for As 188.979 Recovery = 99.41%								
B 249.677†	23197.7	490.63	ug/L	0.795	490.63	ppb	0.795	0.16%
QC value within limits for B 249.677 Recovery = 98.13%								
Ba 233.527†	65420.4	492.65	ug/L	0.454	492.65	ppb	0.454	0.09%
QC value within limits for Ba 233.527 Recovery = 98.53%								
Be 313.107†	1458677.1	492.07	ug/L	0.151	492.07	ppb	0.151	0.03%
QC value within limits for Be 313.107 Recovery = 98.41%								
Ca 317.933Radial†	3185.3	5038.0	ug/L	18.19	5038.0	ppb	18.19	0.36%

QC value within limits for Ca 317.933Radial Recovery = 100.76%

Cd 226.502†	46879.0	494.18 ug/L	0.293	494.18 ppb	0.293	0.06%
QC value within limits for Cd 226.502 Recovery = 98.84%						
Co 228.616†	24097.9	493.44 ug/L	0.811	493.44 ppb	0.811	0.16%
QC value within limits for Co 228.616 Recovery = 98.69%						
Cr 267.716†	47675.5	492.41 ug/L	0.148	492.41 ppb	0.148	0.03%
QC value within limits for Cr 267.716 Recovery = 98.48%						
Cu 324.752†	180538.3	487.69 ug/L	2.724	487.69 ppb	2.724	0.56%
QC value within limits for Cu 324.752 Recovery = 97.54%						
Fe 238.204 Radial†	586.1	5206.3 ug/L	17.42	5206.3 ppb	17.42	0.33%
QC value within limits for Fe 238.204 Radial Recovery = 104.13%						
K 766.490 Radial†	29628.9	5034.8 ug/L	12.54	5034.8 ppb	12.54	0.25%
QC value within limits for K 766.490 Radial Recovery = 100.70%						
Mg 279.077 IEC†	155.1	5208.2 ug/L	85.67	5208.2 ppb	85.67	1.64%
QC value within limits for Mg 279.077 IEC Recovery = 104.16%						
Mn 257.610†	458504.7	492.51 ug/L	0.403	492.51 ppb	0.403	0.08%
QC value within limits for Mn 257.610 Recovery = 98.50%						
Mo 202.031†	7476.2	488.24 ug/L	1.196	488.24 ppb	1.196	0.24%
QC value within limits for Mo 202.031 Recovery = 97.65%						
Na 589.592 Radial†	35740.0	10424 ug/L	30.3	10424 ppb	30.3	0.29%
QC value within limits for Na 589.592 Radial Recovery = 104.24%						
Ni 231.604†	20681.1	494.25 ug/L	1.341	494.25 ppb	1.341	0.27%
QC value within limits for Ni 231.604 Recovery = 98.85%						
P 214.914†	4578.3	2350.8 ug/L	9.20	2350.8 ppb	9.20	0.39%
QC value within limits for P 214.914 Recovery = 94.03%						
Pb 220.353†	4092.4	491.95 ug/L	1.907	491.95 ppb	1.907	0.39%
QC value within limits for Pb 220.353 Recovery = 98.39%						
S 181.975 Axial†	751.5	970.89 ug/L	4.900	970.89 ppb	4.900	0.50%
QC value within limits for S 181.975 Axial Recovery = 97.09%						
Sb 206.836†	1510.3	499.76 ug/L	1.093	499.76 ppb	1.093	0.22%
QC value within limits for Sb 206.836 Recovery = 99.95%						
Se 196.026†	876.2	506.20 ug/L	1.336	506.20 ppb	1.336	0.26%
QC value within limits for Se 196.026 Recovery = 101.24%						
Si 251.611†	86634.6	2442.7 ug/L	5.10	2442.7 ppb	5.10	0.21%
QC value within limits for Si 251.611 Recovery = 97.71%						
Sn 189.927†	2788.9	484.82 ug/L	1.279	484.82 ppb	1.279	0.26%
QC value within limits for Sn 189.927 Recovery = 96.96%						
Sr 421.552†	80520.8	492.71 ug/L	0.944	492.71 ppb	0.944	0.19%
QC value within limits for Sr 421.552 Recovery = 98.54%						
Ti 334.940†	335746.2	479.02 ug/L	1.322	479.02 ppb	1.322	0.28%
QC value within limits for Ti 334.940 Recovery = 95.80%						
Tl 190.801†	1593.3	492.75 ug/L	0.868	492.75 ppb	0.868	0.18%
QC value within limits for Tl 190.801 Recovery = 98.55%						
U 409.014†	20807.9	492.78 ug/L	3.296	492.78 ppb	3.296	0.67%
QC value within limits for U 409.014 Recovery = 98.56%						
V 292.402†	82648.3	496.97 ug/L	0.168	496.97 ppb	0.168	0.03%
QC value within limits for V 292.402 Recovery = 99.39%						
Zn 213.857†	55320.4	488.03 ug/L	0.487	488.03 ppb	0.487	0.10%
QC value within limits for Zn 213.857 Recovery = 97.61%						
SiO2†	85920.1	5199.2 ug/L	28.23	5199.2 ppb	28.23	0.54%
QC value within limits for SiO2 Recovery = 97.23%						

All analyte(s) passed QC.

Sequence No.: 5
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/29/2010 12:17:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5343.0	5343.0	98.8	%			12:19:22
1	Y RADIAL	5792.4	5792.4	99.14	%			12:19:22
1	Al 396.153Radial†	11.5	8.6	6.1791	ug/L	6.1791	ppb	12:19:42
1	Ca 317.933Radial†	21.1	3.8	6.0578	ug/L	6.0578	ppb	12:19:42
1	Fe 238.204 Radial†	12.4	2.9	25.891	ug/L	25.891	ppb	12:19:42
1	K 766.490 Radial†	2425.0	80.6	13.723	ug/L	13.723	ppb	12:19:22
1	Mg 279.077 IEC†	2.0	0.7	24.668	ug/L	24.668	ppb	12:19:42
1	Na 589.592 Radial†	-906.9	-27.6	-8.0423	ug/L	-8.0423	ppb	12:19:22
1	Sr 421.552†	22.9	5.8	0.0357	ug/L	0.0357	ppb	12:19:22
1	Sc 361.383	955936.2	955936.2	99.322	%			12:20:39
1	Y 371.029	848888.1	848888.1	99.455	%			12:20:39
1	Ag 328.068†	379.2	80.4	0.3227	ug/L	0.3227	ppb	12:20:44
1	As 188.979†	-27.2	6.7	2.6051	ug/L	2.6051	ppb	12:21:04
1	B 249.677†	140.1	366.7	7.7866	ug/L	7.7866	ppb	12:21:04
1	Ba 233.527†	0.3	0.1	0.0012	ug/L	0.0012	ppb	12:21:04
1	Be 313.107†	-4866.9	107.9	0.0362	ug/L	0.0362	ppb	12:20:44
1	Cd 226.502†	-182.1	18.1	0.1892	ug/L	0.1892	ppb	12:21:04
1	Co 228.616†	-59.9	16.0	0.3294	ug/L	0.3294	ppb	12:21:04
1	Cr 267.716†	99.2	3.6	0.0347	ug/L	0.0347	ppb	12:21:04
1	Cu 324.752†	8930.8	82.8	0.2220	ug/L	0.2220	ppb	12:20:44
1	Mn 257.610†	664.6	-4.7	-0.0035	ug/L	-0.0035	ppb	12:21:04
1	Mo 202.031†	34.1	12.2	0.8001	ug/L	0.8001	ppb	12:21:04
1	Ni 231.604†	94.1	1.7	0.0412	ug/L	0.0412	ppb	12:21:04
1	P 214.914†	256.7	10.1	5.3517	ug/L	5.3517	ppb	12:21:04
1	Pb 220.353†	-27.6	18.6	2.2346	ug/L	2.2346	ppb	12:21:04
1	S 181.975 Axial†	43.7	-9.3	-11.990	ug/L	-11.990	ppb	12:21:04
1	Sb 206.836†	54.7	18.2	5.8429	ug/L	5.8429	ppb	12:21:04
1	Se 196.026†	-20.3	-8.4	-4.5720	ug/L	-4.5720	ppb	12:21:04
1	Si 251.611†	575.9	62.7	1.7614	ug/L	1.7614	ppb	12:21:04
1	Sn 189.927†	16.7	9.9	1.7145	ug/L	1.7145	ppb	12:21:04
1	Ti 334.940†	-945.6	-44.4	-0.0671	ug/L	-0.0671	ppb	12:20:44
1	Tl 190.801†	-38.1	10.5	3.2103	ug/L	3.2103	ppb	12:21:04
1	U 409.014†	-1292.6	241.6	5.7383	ug/L	5.7383	ppb	12:20:39
1	V 292.402†	-1404.9	-30.6	-0.1626	ug/L	-0.1626	ppb	12:20:44
1	Zn 213.857†	1025.3	4.8	0.0399	ug/L	0.0399	ppb	12:21:04
1	SiO2†	607.0	88.7	5.3564	ug/L	5.3564	ppb	12:22:10
2	Sc Radial	5352.5	5352.5	99.0	%			12:19:47
2	Y RADIAL	5758.4	5758.4	98.56	%			12:19:47
2	Al 396.153Radial†	13.6	10.8	7.7523	ug/L	7.7523	ppb	12:20:07
2	Ca 317.933Radial†	20.9	3.5	5.6074	ug/L	5.6074	ppb	12:20:07
2	Fe 238.204 Radial†	13.1	3.6	31.704	ug/L	31.704	ppb	12:20:07
2	K 766.490 Radial†	2454.6	106.2	18.071	ug/L	18.071	ppb	12:19:47
2	Mg 279.077 IEC†	4.2	3.0	99.956	ug/L	99.956	ppb	12:20:07
2	Na 589.592 Radial†	-854.6	26.8	7.8230	ug/L	7.8230	ppb	12:19:47
2	Sr 421.552†	18.8	1.6	0.0100	ug/L	0.0100	ppb	12:19:47
2	Sc 361.383	957917.1	957917.1	99.528	%			12:21:09
2	Y 371.029	850454.8	850454.8	99.638	%			12:21:09
2	Ag 328.068†	406.5	107.1	0.4319	ug/L	0.4319	ppb	12:21:14
2	As 188.979†	-18.3	15.6	6.0912	ug/L	6.0912	ppb	12:21:34
2	B 249.677†	105.9	332.0	7.0488	ug/L	7.0488	ppb	12:21:34
2	Ba 233.527†	8.9	8.7	0.0666	ug/L	0.0666	ppb	12:21:34
2	Be 313.107†	-4979.6	4.7	0.0014	ug/L	0.0014	ppb	12:21:14
2	Cd 226.502†	-189.5	11.0	0.1135	ug/L	0.1135	ppb	12:21:34
2	Co 228.616†	-60.8	15.3	0.3135	ug/L	0.3135	ppb	12:21:34
2	Cr 267.716†	96.9	1.1	0.0098	ug/L	0.0098	ppb	12:21:34
2	Cu 324.752†	9044.5	178.4	0.4808	ug/L	0.4808	ppb	12:21:14
2	Mn 257.610†	676.0	5.4	0.0048	ug/L	0.0048	ppb	12:21:34
2	Mo 202.031†	30.3	8.4	0.5494	ug/L	0.5494	ppb	12:21:34
2	Ni 231.604†	95.6	3.0	0.0718	ug/L	0.0718	ppb	12:21:34

2	P 214.914†	243.6	-3.7	-2.0835 ug/L	-2.0835 ppb	12:21:34
2	Pb 220.353†	-28.9	17.3	2.0777 ug/L	2.0777 ppb	12:21:34
2	S 181.975 Axial†	39.9	-13.1	-16.996 ug/L	-16.996 ppb	12:21:34
2	Sb 206.836†	51.5	14.8	4.7254 ug/L	4.7254 ppb	12:21:34
2	Se 196.026†	-15.2	-3.2	-1.6890 ug/L	-1.6890 ppb	12:21:34
2	Si 251.611†	591.7	77.3	2.1788 ug/L	2.1788 ppb	12:21:34
2	Sn 189.927†	3.7	-3.3	-0.5637 ug/L	-0.5637 ppb	12:21:34
2	Ti 334.940†	-946.8	-43.6	-0.0719 ug/L	-0.0719 ppb	12:21:14
2	Tl 190.801†	-46.0	2.6	0.8111 ug/L	0.8111 ppb	12:21:34
2	U 409.014†	-1319.9	216.9	5.1498 ug/L	5.1498 ppb	12:21:09
2	V 292.402†	-1382.0	-4.7	-0.0127 ug/L	-0.0127 ppb	12:21:14
2	Zn 213.857†	1016.1	-6.5	-0.0623 ug/L	-0.0623 ppb	12:21:34
2	SiO2†	581.3	61.5	3.7186 ug/L	3.7186 ppb	12:22:15
3	Sc Radial	5344.2	5344.2	98.8 %		12:20:12
3	Y RADIAL	5771.1	5771.1	98.77 %		12:20:12
3	Al 396.153Radial†	8.2	5.3	3.8124 ug/L	3.8124 ppb	12:20:32
3	Ca 317.933Radial†	22.1	4.8	7.6102 ug/L	7.6102 ppb	12:20:32
3	Fe 238.204 Radial†	7.5	-2.0	-18.061 ug/L	-18.061 ppb	12:20:32
3	K 766.490 Radial†	2483.5	139.3	23.711 ug/L	23.711 ppb	12:20:12
3	Mg 279.077 IEC†	-1.3	-2.7	-89.740 ug/L	-89.740 ppb	12:20:32
3	Na 589.592 Radial†	-935.0	-55.9	-16.290 ug/L	-16.290 ppb	12:20:12
3	Sr 421.552†	11.4	-5.9	-0.0360 ug/L	-0.0360 ppb	12:20:12
3	Sc 361.383	956977.4	956977.4	99.430 %		12:21:39
3	Y 371.029	850012.8	850012.8	99.587 %		12:21:39
3	Ag 328.068†	473.4	174.8	0.6871 ug/L	0.6871 ppb	12:21:44
3	As 188.979†	-29.8	4.0	1.5712 ug/L	1.5712 ppb	12:22:05
3	B 249.677†	138.4	364.9	7.7560 ug/L	7.7560 ppb	12:22:05
3	Ba 233.527†	3.6	3.5	0.0261 ug/L	0.0261 ppb	12:22:05
3	Be 313.107†	-4862.6	117.5	0.0396 ug/L	0.0396 ppb	12:21:44
3	Cd 226.502†	-177.2	23.2	0.2471 ug/L	0.2471 ppb	12:22:05
3	Co 228.616†	-75.6	0.3	0.0077 ug/L	0.0077 ppb	12:22:05
3	Cr 267.716†	108.4	12.7	0.1297 ug/L	0.1297 ppb	12:22:05
3	Cu 324.752†	8890.3	32.3	0.0840 ug/L	0.0840 ppb	12:21:44
3	Mn 257.610†	667.6	-2.4	-0.0007 ug/L	-0.0007 ppb	12:22:05
3	Mo 202.031†	28.8	6.9	0.4484 ug/L	0.4484 ppb	12:22:05
3	Ni 231.604†	89.5	-3.1	-0.0735 ug/L	-0.0735 ppb	12:22:05
3	P 214.914†	247.3	0.4	0.2090 ug/L	0.2090 ppb	12:22:05
3	Pb 220.353†	-20.3	26.0	3.1195 ug/L	3.1195 ppb	12:22:05
3	S 181.975 Axial†	48.1	-4.9	-6.3708 ug/L	-6.3708 ppb	12:22:05
3	Sb 206.836†	44.6	7.9	2.5684 ug/L	2.5684 ppb	12:22:05
3	Se 196.026†	-13.9	-2.0	-1.1517 ug/L	-1.1517 ppb	12:22:05
3	Si 251.611†	586.6	72.7	2.0502 ug/L	2.0502 ppb	12:22:05
3	Sn 189.927†	15.5	8.7	1.5033 ug/L	1.5033 ppb	12:22:05
3	Ti 334.940†	-881.6	21.0	0.0366 ug/L	0.0366 ppb	12:21:44
3	Tl 190.801†	-37.9	10.8	3.3029 ug/L	3.3029 ppb	12:22:05
3	U 409.014†	-1371.2	164.0	3.8987 ug/L	3.8987 ppb	12:21:39
3	V 292.402†	-1341.0	35.2	0.2234 ug/L	0.2234 ppb	12:21:44
3	Zn 213.857†	1015.1	-6.5	-0.0561 ug/L	-0.0561 ppb	12:22:05
3	SiO2†	614.1	95.1	5.7566 ug/L	5.7566 ppb	12:22:20

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	956943.6	99.427	%	0.1030				0.10%
Sc Radial	5346.6	98.9	%	0.10				0.10%
Y 371.029	849785.2	99.560	%	0.0946				0.10%
Y RADIAL	5774.0	98.82	%	0.294				0.30%
Ag 328.068†	120.8	0.4806	ug/L	0.18700	0.4806	ppb	0.18700	38.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	8.2	5.9146	ug/L	1.98325	5.9146	ppb	1.98325	33.53%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.8	3.4225	ug/L	2.36827	3.4225	ppb	2.36827	69.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	354.6	7.5305	ug/L	0.41743	7.5305	ppb	0.41743	5.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.1	0.0313	ug/L	0.03300	0.0313	ppb	0.03300	105.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	76.7	0.0257	ug/L	0.02111	0.0257	ppb	0.02111	82.02%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.1	6.4251	ug/L	1.05072	6.4251	ppb	1.05072	16.35%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                17.4      0.1833 ug/L       0.06700      0.1833 ppb        0.06700  36.55%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                10.5      0.2169 ug/L       0.18131      0.2169 ppb        0.18131  83.59%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 5.8      0.0581 ug/L       0.06324      0.0581 ppb        0.06324 108.92%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                97.8      0.2623 ug/L       0.20141      0.2623 ppb        0.20141  76.80%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.5     13.178 ug/L       27.2094     13.178 ppb        27.2094 206.48%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         108.7     18.502 ug/L        5.0081     18.502 ppb         5.0081  27.07%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.3     11.628 ug/L       95.5179     11.628 ppb        95.5179 821.44%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                -0.6      0.0002 ug/L       0.00423      0.0002 ppb        0.00423 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 9.2      0.5993 ug/L       0.18107      0.5993 ppb        0.18107  30.21%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -18.9     -5.5031 ug/L      12.25537     -5.5031 ppb       12.25537 222.70%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 0.6      0.0131 ug/L       0.07657      0.0131 ppb        0.07657 582.79%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  2.3      1.1591 ug/L       3.80753      1.1591 ppb        3.80753 328.50%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                20.7      2.4773 ug/L       0.56171      2.4773 ppb        0.56171  22.67%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -9.1    -11.786 ug/L        5.3157    -11.786 ppb         5.3157  45.10%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                13.6      4.3789 ug/L       1.66449      4.3789 ppb        1.66449  38.01%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -4.5     -2.4709 ug/L       1.83930     -2.4709 ppb        1.83930  74.44%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                70.9      1.9968 ug/L       0.21380      1.9968 ppb        0.21380  10.71%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 5.1      0.8847 ug/L       1.25881      0.8847 ppb        1.25881 142.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 0.5      0.0032 ug/L       0.03634      0.0032 ppb        0.03634 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -22.3     -0.0342 ug/L       0.06132     -0.0342 ppb        0.06132 179.54%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 8.0      2.4414 ug/L       1.41266      2.4414 ppb        1.41266  57.86%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                207.5      4.9290 ug/L       0.93951      4.9290 ppb        0.93951  19.06%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -0.0      0.0161 ug/L       0.19456      0.0161 ppb        0.19456 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -2.7     -0.0262 ug/L       0.05731     -0.0262 ppb        0.05731 219.02%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      81.8      4.9439 ug/L       1.07979      4.9439 ppb        1.07979  21.84%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/29/2010 13:38:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5221.0	5221.0	96.5	%			13:39:53
1	Y RADIAL	5621.2	5621.2	96.21	%			13:39:53
1	Al 396.153Radial†	6453.6	6681.6	4811.0	ug/L	4811.0	ppb	13:39:53
1	Ca 317.933Radial†	3120.1	3214.3	5083.9	ug/L	5083.9	ppb	13:40:13
1	Fe 238.204 Radial†	583.3	594.6	5281.1	ug/L	5281.1	ppb	13:40:13
1	K 766.490 Radial†	31825.9	30591.8	5198.0	ug/L	5198.0	ppb	13:39:53
1	Mg 279.077 IEC†	153.4	157.6	5292.8	ug/L	5292.8	ppb	13:40:13
1	Na 589.592 Radial†	39370.3	41670.3	12154	ug/L	12154	ppb	13:39:53
1	Sr 421.552†	79611.3	82444.6	504.48	ug/L	504.48	ppb	13:39:53
1	Sc 361.383	944014.8	944014.8	98.084	%			13:41:11
1	Y 371.029	825767.9	825767.9	96.746	%			13:41:11
1	Ag 328.068†	121706.9	123783.5	495.67	ug/L	495.67	ppb	13:41:16
1	As 188.979†	1202.9	1260.4	495.03	ug/L	495.03	ppb	13:41:36
1	B 249.677†	22193.3	22852.6	483.28	ug/L	483.28	ppb	13:41:16
1	Ba 233.527†	64522.1	65782.6	495.37	ug/L	495.37	ppb	13:41:16
1	Be 313.107†	1424443.6	1457283.1	491.61	ug/L	491.61	ppb	13:41:11
1	Cd 226.502†	45956.1	47055.4	496.03	ug/L	496.03	ppb	13:41:16
1	Co 228.616†	23758.0	24298.5	497.54	ug/L	497.54	ppb	13:41:16
1	Cr 267.716†	46973.4	47794.9	493.64	ug/L	493.64	ppb	13:41:16
1	Cu 324.752†	186178.9	180907.6	488.69	ug/L	488.69	ppb	13:41:16
1	Mn 257.610†	453836.5	462029.9	496.30	ug/L	496.30	ppb	13:41:11
1	Mo 202.031†	7381.2	7503.3	490.01	ug/L	490.01	ppb	13:41:36
1	Ni 231.604†	20429.3	20735.4	495.55	ug/L	495.55	ppb	13:41:16
1	P 214.914†	4772.4	4617.3	2371.4	ug/L	2371.4	ppb	13:41:36
1	Pb 220.353†	4002.8	4127.4	496.14	ug/L	496.14	ppb	13:41:36
1	S 181.975 Axial†	790.7	752.9	972.67	ug/L	972.67	ppb	13:41:36
1	Sb 206.836†	1556.5	1550.0	512.55	ug/L	512.55	ppb	13:41:36
1	Se 196.026†	853.6	882.3	509.88	ug/L	509.88	ppb	13:41:36
1	Si 251.611†	85899.6	87060.8	2454.8	ug/L	2454.8	ppb	13:41:16
1	Sn 189.927†	2769.4	2816.6	489.63	ug/L	489.63	ppb	13:41:36
1	Ti 334.940†	330285.5	337646.5	481.73	ug/L	481.73	ppb	13:41:16
1	Tl 190.801†	1523.0	1601.7	495.34	ug/L	495.34	ppb	13:41:36
1	U 409.014†	19128.1	21044.9	498.40	ug/L	498.40	ppb	13:41:16
1	V 292.402†	79850.7	82794.7	497.86	ug/L	497.86	ppb	13:41:16
1	Zn 213.857†	55580.7	55639.2	490.85	ug/L	490.85	ppb	13:41:16
1	SiO2†	86334.6	87499.0	5294.9	ug/L	5294.9	ppb	13:42:44
2	Sc Radial	5290.0	5290.0	97.8	%			13:40:19
2	Y RADIAL	5666.6	5666.6	96.98	%			13:40:19
2	Al 396.153Radial†	6546.5	6689.4	4816.5	ug/L	4816.5	ppb	13:40:19
2	Ca 317.933Radial†	3148.8	3201.5	5063.6	ug/L	5063.6	ppb	13:40:39
2	Fe 238.204 Radial†	586.1	589.6	5237.1	ug/L	5237.1	ppb	13:40:39
2	K 766.490 Radial†	31989.8	30329.1	5153.3	ug/L	5153.3	ppb	13:40:19
2	Mg 279.077 IEC†	154.5	156.7	5262.7	ug/L	5262.7	ppb	13:40:39
2	Na 589.592 Radial†	39594.3	41367.3	12066	ug/L	12066	ppb	13:40:19
2	Sr 421.552†	80486.9	82263.9	503.38	ug/L	503.38	ppb	13:40:19
2	Sc 361.383	936461.0	936461.0	97.299	%			13:41:42
2	Y 371.029	821159.7	821159.7	96.206	%			13:41:42
2	Ag 328.068†	121498.1	124569.8	498.80	ug/L	498.80	ppb	13:41:47
2	As 188.979†	1209.2	1276.8	501.41	ug/L	501.41	ppb	13:42:07
2	B 249.677†	22180.5	23021.9	486.88	ug/L	486.88	ppb	13:41:47
2	Ba 233.527†	64130.8	65911.1	496.34	ug/L	496.34	ppb	13:41:47
2	Be 313.107†	1417231.5	1461585.1	493.06	ug/L	493.06	ppb	13:41:42
2	Cd 226.502†	45754.3	47225.9	497.84	ug/L	497.84	ppb	13:41:47
2	Co 228.616†	23624.8	24357.0	498.75	ug/L	498.75	ppb	13:41:47
2	Cr 267.716†	46915.1	48121.2	497.01	ug/L	497.01	ppb	13:41:47
2	Cu 324.752†	185771.0	182019.5	491.69	ug/L	491.69	ppb	13:41:47
2	Mn 257.610†	449885.8	461701.9	495.95	ug/L	495.95	ppb	13:41:42
2	Mo 202.031†	7377.8	7560.5	493.74	ug/L	493.74	ppb	13:42:07
2	Ni 231.604†	20379.5	20852.3	498.34	ug/L	498.34	ppb	13:41:47

2	P 214.914†	4763.7	4647.6	2387.1 ug/L	2387.1 ppb	13:42:07
2	Pb 220.353†	4006.5	4164.2	500.56 ug/L	500.56 ppb	13:42:07
2	S 181.975 Axial†	808.4	777.6	1004.6 ug/L	1004.6 ppb	13:42:07
2	Sb 206.836†	1546.2	1552.2	513.46 ug/L	513.46 ppb	13:42:07
2	Se 196.026†	855.1	890.9	514.49 ug/L	514.49 ppb	13:42:07
2	Si 251.611†	85483.3	87339.4	2462.6 ug/L	2462.6 ppb	13:41:47
2	Sn 189.927†	2792.6	2863.2	497.72 ug/L	497.72 ppb	13:42:07
2	Ti 334.940†	328886.7	338925.1	483.55 ug/L	483.55 ppb	13:41:47
2	Tl 190.801†	1528.9	1620.2	501.05 ug/L	501.05 ppb	13:42:07
2	U 409.014†	18851.9	20918.3	495.39 ug/L	495.39 ppb	13:41:47
2	V 292.402†	79796.5	83395.8	501.48 ug/L	501.48 ppb	13:41:47
2	Zn 213.857†	55322.6	55830.9	492.54 ug/L	492.54 ppb	13:41:47
2	SiO2†	85263.7	87108.3	5271.1 ug/L	5271.1 ppb	13:42:49
3	Sc Radial	5235.7	5235.7	96.8 %		13:40:44
3	Y RADIAL	5658.2	5658.2	96.84 %		13:40:44
3	Al 396.153Radial†	6538.3	6750.2	4860.4 ug/L	4860.4 ppb	13:40:44
3	Ca 317.933Radial†	3150.7	3236.7	5119.4 ug/L	5119.4 ppb	13:41:04
3	Fe 238.204 Radial†	591.4	601.2	5339.9 ug/L	5339.9 ppb	13:41:04
3	K 766.490 Radial†	32102.6	30784.5	5230.8 ug/L	5230.8 ppb	13:40:44
3	Mg 279.077 IEC†	154.6	158.4	5319.2 ug/L	5319.2 ppb	13:41:04
3	Na 589.592 Radial†	39486.7	41675.5	12155 ug/L	12155 ppb	13:40:44
3	Sr 421.552†	80200.1	82820.1	506.78 ug/L	506.78 ppb	13:40:44
3	Sc 361.383	939052.5	939052.5	97.568 %		13:42:13
3	Y 371.029	823449.8	823449.8	96.474 %		13:42:13
3	Ag 328.068†	121182.4	123901.7	496.17 ug/L	496.17 ppb	13:42:18
3	As 188.979†	1212.1	1276.3	501.23 ug/L	501.23 ppb	13:42:38
3	B 249.677†	22191.9	22970.7	485.78 ug/L	485.78 ppb	13:42:18
3	Ba 233.527†	64314.5	65917.4	496.39 ug/L	496.39 ppb	13:42:18
3	Be 313.107†	1424401.7	1464914.3	494.18 ug/L	494.18 ppb	13:42:13
3	Cd 226.502†	46096.0	47446.4	500.15 ug/L	500.15 ppb	13:42:18
3	Co 228.616†	23662.4	24328.5	498.17 ug/L	498.17 ppb	13:42:18
3	Cr 267.716†	46993.7	48068.8	496.47 ug/L	496.47 ppb	13:42:18
3	Cu 324.752†	184680.0	180374.4	487.25 ug/L	487.25 ppb	13:42:18
3	Mn 257.610†	452018.8	462612.0	496.93 ug/L	496.93 ppb	13:42:13
3	Mo 202.031†	7414.8	7577.5	494.86 ug/L	494.86 ppb	13:42:38
3	Ni 231.604†	20386.0	20801.1	497.12 ug/L	497.12 ppb	13:42:18
3	P 214.914†	4790.7	4661.8	2395.5 ug/L	2395.5 ppb	13:42:38
3	Pb 220.353†	4023.7	4170.4	501.31 ug/L	501.31 ppb	13:42:38
3	S 181.975 Axial†	806.0	772.8	998.36 ug/L	998.36 ppb	13:42:38
3	Sb 206.836†	1556.3	1558.1	515.33 ug/L	515.33 ppb	13:42:38
3	Se 196.026†	868.7	902.4	521.27 ug/L	521.27 ppb	13:42:38
3	Si 251.611†	85404.0	87015.5	2453.4 ug/L	2453.4 ppb	13:42:18
3	Sn 189.927†	2786.2	2848.7	495.21 ug/L	495.21 ppb	13:42:38
3	Ti 334.940†	328773.9	337876.6	482.06 ug/L	482.06 ppb	13:42:18
3	Tl 190.801†	1525.2	1612.1	498.55 ug/L	498.55 ppb	13:42:38
3	U 409.014†	18737.1	20747.2	491.31 ug/L	491.31 ppb	13:42:18
3	V 292.402†	79702.2	83072.8	499.56 ug/L	499.56 ppb	13:42:18
3	Zn 213.857†	55398.7	55752.1	491.85 ug/L	491.85 ppb	13:42:18
3	SiO2†	84988.5	86584.4	5239.3 ug/L	5239.3 ppb	13:42:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	939842.8	97.650	%	0.3988				0.41%
Sc Radial	5248.9	97.1	%	0.67				0.69%
Y 371.029	823459.1	96.476	%	0.2699				0.28%
Y RADIAL	5648.7	96.68	%	0.414				0.43%
Ag 328.068†	124085.0	496.88	ug/L	1.682	496.88	ppb	1.682	0.34%
QC value within limits for Ag 328.068 Recovery = 99.38%								
Al 396.153Radial†	6707.1	4829.3	ug/L	27.09	4829.3	ppb	27.09	0.56%
QC value within limits for Al 396.153Radial Recovery = 96.59%								
As 188.979†	1271.2	499.23	ug/L	3.634	499.23	ppb	3.634	0.73%
QC value within limits for As 188.979 Recovery = 99.85%								
B 249.677†	22948.4	485.31	ug/L	1.846	485.31	ppb	1.846	0.38%
QC value within limits for B 249.677 Recovery = 97.06%								
Ba 233.527†	65870.4	496.03	ug/L	0.575	496.03	ppb	0.575	0.12%
QC value within limits for Ba 233.527 Recovery = 99.21%								
Be 313.107†	1461260.8	492.95	ug/L	1.288	492.95	ppb	1.288	0.26%
QC value within limits for Be 313.107 Recovery = 98.59%								
Ca 317.933Radial†	3217.5	5088.9	ug/L	28.24	5088.9	ppb	28.24	0.55%

```
   QC value within limits for Ca 317.933Radial  Recovery = 101.78%
Cd 226.502†            47242.6      498.00 ug/L        2.063      498.00 ppb        2.063   0.41%
   QC value within limits for Cd 226.502  Recovery = 99.60%
Co 228.616†            24328.0      498.15 ug/L        0.601      498.15 ppb        0.601   0.12%
   QC value within limits for Co 228.616  Recovery = 99.63%
Cr 267.716†            47995.0      495.71 ug/L        1.811      495.71 ppb        1.811   0.37%
   QC value within limits for Cr 267.716  Recovery = 99.14%
Cu 324.752†           181100.5      489.21 ug/L        2.264      489.21 ppb        2.264   0.46%
   QC value within limits for Cu 324.752  Recovery = 97.84%
Fe 238.204 Radial†       595.1      5286.0 ug/L       51.57      5286.0 ppb        51.57   0.98%
   QC value within limits for Fe 238.204 Radial  Recovery = 105.72%
K 766.490 Radial†      30568.4      5194.0 ug/L       38.86      5194.0 ppb        38.86   0.75%
   QC value within limits for K 766.490 Radial  Recovery = 103.88%
Mg 279.077 IEC†          157.5      5291.5 ug/L       28.26      5291.5 ppb        28.26   0.53%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.83%
Mn 257.610†           462114.6      496.39 ug/L        0.499      496.39 ppb        0.499   0.10%
   QC value within limits for Mn 257.610  Recovery = 99.28%
Mo 202.031†             7547.1      492.87 ug/L        2.536      492.87 ppb        2.536   0.51%
   QC value within limits for Mo 202.031  Recovery = 98.57%
Na 589.592 Radial†     41571.1       12125 ug/L         51.5       12125 ppb         51.5   0.42%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = 121.25%
Ni 231.604†            20796.3      497.00 ug/L        1.400      497.00 ppb        1.400   0.28%
   QC value within limits for Ni 231.604  Recovery = 99.40%
P 214.914†              4642.2      2384.7 ug/L       12.22      2384.7 ppb        12.22   0.51%
   QC value within limits for P 214.914  Recovery = 95.39%
Pb 220.353†             4154.0      499.34 ug/L        2.796      499.34 ppb        2.796   0.56%
   QC value within limits for Pb 220.353  Recovery = 99.87%
S 181.975 Axial†         767.7      991.86 ug/L       16.905      991.86 ppb       16.905   1.70%
   QC value within limits for S 181.975 Axial  Recovery = 99.19%
Sb 206.836†             1553.5      513.78 ug/L        1.416      513.78 ppb        1.416   0.28%
   QC value within limits for Sb 206.836  Recovery = 102.76%
Se 196.026†              891.9      515.21 ug/L        5.730      515.21 ppb        5.730   1.11%
   QC value within limits for Se 196.026  Recovery = 103.04%
Si 251.611†            87138.6      2456.9 ug/L        4.95      2456.9 ppb         4.95   0.20%
   QC value within limits for Si 251.611  Recovery = 98.28%
Sn 189.927†             2842.8      494.19 ug/L        4.141      494.19 ppb        4.141   0.84%
   QC value within limits for Sn 189.927  Recovery = 98.84%
Sr 421.552†            82509.5      504.88 ug/L        1.736      504.88 ppb        1.736   0.34%
   QC value within limits for Sr 421.552  Recovery = 100.98%
Ti 334.940†           338149.4      482.45 ug/L        0.972      482.45 ppb        0.972   0.20%
   QC value within limits for Ti 334.940  Recovery = 96.49%
Tl 190.801†             1611.3      498.31 ug/L        2.862      498.31 ppb        2.862   0.57%
   QC value within limits for Tl 190.801  Recovery = 99.66%
U 409.014†             20903.5      495.03 ug/L        3.557      495.03 ppb        3.557   0.72%
   QC value within limits for U 409.014  Recovery = 99.01%
V 292.402†             83087.8      499.63 ug/L        1.809      499.63 ppb        1.809   0.36%
   QC value within limits for V 292.402  Recovery = 99.93%
Zn 213.857†            55740.7      491.75 ug/L        0.849      491.75 ppb        0.849   0.17%
   QC value within limits for Zn 213.857  Recovery = 98.35%
SiO2†                  87063.9      5268.4 ug/L       27.90      5268.4 ppb        27.90   0.53%
   QC value within limits for SiO2  Recovery = 98.52%
QC Failed.  Continue with analysis.
```

Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/29/2010 13:45:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5194.8	5194.8	96.1	%			13:46:57
1	Y RADIAL	5575.9	5575.9	95.43	%			13:46:57
1	Al 396.153Radial†	7.7	5.0	3.5709	ug/L	3.5709	ppb	13:47:17
1	Ca 317.933Radial†	35.4	19.3	30.504	ug/L	30.504	ppb	13:47:17
1	Fe 238.204 Radial†	12.2	3.1	27.696	ug/L	27.696	ppb	13:47:17
1	K 766.490 Radial†	2936.6	683.4	115.92	ug/L	115.92	ppb	13:46:57
1	Mg 279.077 IEC†	3.1	1.9	65.078	ug/L	65.078	ppb	13:47:17
1	Na 589.592 Radial†	2067.4	3042.5	887.40	ug/L	887.40	ppb	13:46:57
1	Sr 421.552†	54.6	39.5	0.2414	ug/L	0.2414	ppb	13:46:57
1	Sc 361.383	935607.5	935607.5	97.210	%			13:48:14
1	Y 371.029	827810.0	827810.0	96.985	%			13:48:14
1	Ag 328.068†	369.4	78.6	0.3220	ug/L	0.3220	ppb	13:48:19
1	As 188.979†	-32.3	0.9	0.3443	ug/L	0.3443	ppb	13:48:39
1	B 249.677†	-100.8	122.0	2.5883	ug/L	2.5883	ppb	13:48:39
1	Ba 233.527†	14.0	14.2	0.1068	ug/L	0.1068	ppb	13:48:39
1	Be 313.107†	-5031.4	-167.8	-0.0569	ug/L	-0.0569	ppb	13:48:19
1	Cd 226.502†	-190.8	5.1	0.0506	ug/L	0.0506	ppb	13:48:39
1	Co 228.616†	-82.6	-8.6	-0.1747	ug/L	-0.1747	ppb	13:48:39
1	Cr 267.716†	96.8	3.3	0.0349	ug/L	0.0349	ppb	13:48:39
1	Cu 324.752†	8725.1	66.5	0.1825	ug/L	0.1825	ppb	13:48:19
1	Mn 257.610†	558.5	-99.3	-0.1066	ug/L	-0.1066	ppb	13:48:39
1	Mo 202.031†	30.7	9.5	0.6199	ug/L	0.6199	ppb	13:48:39
1	Ni 231.604†	104.6	14.5	0.3473	ug/L	0.3473	ppb	13:48:39
1	P 214.914†	260.3	19.4	10.294	ug/L	10.294	ppb	13:48:39
1	Pb 220.353†	-39.5	5.8	0.6950	ug/L	0.6950	ppb	13:48:39
1	S 181.975 Axial†	45.7	-6.2	-8.0802	ug/L	-8.0802	ppb	13:48:39
1	Sb 206.836†	52.8	17.4	5.5800	ug/L	5.5800	ppb	13:48:39
1	Se 196.026†	-22.9	-11.5	-6.2799	ug/L	-6.2799	ppb	13:48:39
1	Si 251.611†	585.5	85.1	2.3988	ug/L	2.3988	ppb	13:48:39
1	Sn 189.927†	9.4	2.7	0.4776	ug/L	0.4776	ppb	13:48:39
1	Ti 334.940†	-998.7	-119.7	-0.1710	ug/L	-0.1710	ppb	13:48:19
1	Tl 190.801†	-39.9	7.9	2.4154	ug/L	2.4154	ppb	13:48:39
1	U 409.014†	-1592.5	-95.2	-2.2644	ug/L	-2.2644	ppb	13:48:19
1	V 292.402†	-1392.6	-48.6	-0.2868	ug/L	-0.2868	ppb	13:48:19
1	Zn 213.857†	999.7	0.9	0.0031	ug/L	0.0031	ppb	13:48:39
1	SiO2†	657.9	154.3	9.3419	ug/L	9.3419	ppb	13:49:45
2	Sc Radial	5313.5	5313.5	98.3	%			13:47:22
2	Y RADIAL	5710.3	5710.3	97.73	%			13:47:22
2	Al 396.153Radial†	3.5	0.5	0.3498	ug/L	0.3498	ppb	13:47:42
2	Ca 317.933Radial†	30.1	13.1	20.750	ug/L	20.750	ppb	13:47:42
2	Fe 238.204 Radial†	11.7	2.3	20.755	ug/L	20.755	ppb	13:47:42
2	K 766.490 Radial†	2938.8	617.2	104.67	ug/L	104.67	ppb	13:47:22
2	Mg 279.077 IEC†	3.6	2.3	77.438	ug/L	77.438	ppb	13:47:42
2	Na 589.592 Radial†	2085.4	3012.7	878.72	ug/L	878.72	ppb	13:47:22
2	Sr 421.552†	36.5	19.8	0.1207	ug/L	0.1207	ppb	13:47:22
2	Sc 361.383	940329.3	940329.3	97.701	%			13:48:44
2	Y 371.029	832401.9	832401.9	97.523	%			13:48:44
2	Ag 328.068†	310.0	15.9	0.0711	ug/L	0.0711	ppb	13:48:49
2	As 188.979†	-26.8	6.6	2.5653	ug/L	2.5653	ppb	13:49:09
2	B 249.677†	-133.0	89.5	1.8990	ug/L	1.8990	ppb	13:49:09
2	Ba 233.527†	5.1	5.1	0.0381	ug/L	0.0381	ppb	13:49:09
2	Be 313.107†	-4920.3	-28.1	-0.0099	ug/L	-0.0099	ppb	13:48:49
2	Cd 226.502†	-203.2	-6.6	-0.0720	ug/L	-0.0720	ppb	13:49:09
2	Co 228.616†	-78.9	-4.5	-0.0913	ug/L	-0.0913	ppb	13:49:09
2	Cr 267.716†	105.6	11.8	0.1229	ug/L	0.1229	ppb	13:49:09
2	Cu 324.752†	8740.2	36.9	0.1026	ug/L	0.1026	ppb	13:48:49
2	Mn 257.610†	558.9	-101.8	-0.1104	ug/L	-0.1104	ppb	13:49:09
2	Mo 202.031†	23.1	1.6	0.1055	ug/L	0.1055	ppb	13:49:09
2	Ni 231.604†	82.2	-8.9	-0.2133	ug/L	-0.2133	ppb	13:49:09

2	P 214.914†	260.3	18.0	9.6088 ug/L	9.6088 ppb	13:49:09
2	Pb 220.353†	-54.8	-9.6	-1.1543 ug/L	-1.1543 ppb	13:49:09
2	S 181.975 Axial†	51.5	-0.5	-0.6916 ug/L	-0.6916 ppb	13:49:09
2	Sb 206.836†	36.6	0.5	0.1781 ug/L	0.1781 ppb	13:49:09
2	Se 196.026†	-20.4	-8.8	-4.8408 ug/L	-4.8408 ppb	13:49:09
2	Si 251.611†	584.1	80.6	2.2768 ug/L	2.2768 ppb	13:49:09
2	Sn 189.927†	8.6	1.8	0.3187 ug/L	0.3187 ppb	13:49:09
2	Ti 334.940†	-1010.9	-127.0	-0.1834 ug/L	-0.1834 ppb	13:48:49
2	Tl 190.801†	-37.8	10.1	3.1102 ug/L	3.1102 ppb	13:49:09
2	U 409.014†	-1642.6	-138.2	-3.2871 ug/L	-3.2871 ppb	13:48:49
2	V 292.402†	-1410.1	-59.4	-0.3588 ug/L	-0.3588 ppb	13:48:49
2	Zn 213.857†	971.0	-33.6	-0.3002 ug/L	-0.3002 ppb	13:49:09
2	SiO2†	607.1	98.9	5.9975 ug/L	5.9975 ppb	13:49:50
3	Sc Radial	5224.2	5224.2	96.6 %		13:47:47
3	Y RADIAL	5610.3	5610.3	96.02 %		13:47:47
3	Al 396.153Radial†	9.2	6.5	4.6883 ug/L	4.6883 ppb	13:48:07
3	Ca 317.933Radial†	30.7	14.2	22.485 ug/L	22.485 ppb	13:48:07
3	Fe 238.204 Radial†	10.2	1.0	8.5912 ug/L	8.5912 ppb	13:48:07
3	K 766.490 Radial†	2963.2	693.6	117.67 ug/L	117.67 ppb	13:47:47
3	Mg 279.077 IEC†	0.7	-0.6	-19.143 ug/L	-19.143 ppb	13:48:07
3	Na 589.592 Radial†	2028.5	2990.1	872.13 ug/L	872.13 ppb	13:47:47
3	Sr 421.552†	38.9	22.9	0.1402 ug/L	0.1402 ppb	13:47:47
3	Sc 361.383	952189.4	952189.4	98.933 %		13:49:14
3	Y 371.029	843766.2	843766.2	98.855 %		13:49:14
3	Ag 328.068†	318.0	20.1	0.0795 ug/L	0.0795 ppb	13:49:19
3	As 188.979†	-34.5	-0.8	-0.3251 ug/L	-0.3251 ppb	13:49:39
3	B 249.677†	-161.6	62.3	1.3229 ug/L	1.3229 ppb	13:49:39
3	Ba 233.527†	0.8	0.6	0.0041 ug/L	0.0041 ppb	13:49:39
3	Be 313.107†	-4895.3	59.8	0.0200 ug/L	0.0200 ppb	13:49:19
3	Cd 226.502†	-193.1	6.2	0.0649 ug/L	0.0649 ppb	13:49:39
3	Co 228.616†	-72.3	3.2	0.0670 ug/L	0.0670 ppb	13:49:39
3	Cr 267.716†	91.2	-4.1	-0.0437 ug/L	-0.0437 ppb	13:49:39
3	Cu 324.752†	8768.7	-45.7	-0.1241 ug/L	-0.1241 ppb	13:49:19
3	Mn 257.610†	567.2	-100.5	-0.1062 ug/L	-0.1062 ppb	13:49:39
3	Mo 202.031†	28.3	6.5	0.4264 ug/L	0.4264 ppb	13:49:39
3	Ni 231.604†	86.4	-5.7	-0.1374 ug/L	-0.1374 ppb	13:49:39
3	P 214.914†	247.3	1.6	0.8567 ug/L	0.8567 ppb	13:49:39
3	Pb 220.353†	-63.6	-17.9	-2.1449 ug/L	-2.1449 ppb	13:49:39
3	S 181.975 Axial†	48.5	-4.2	-5.4645 ug/L	-5.4645 ppb	13:49:39
3	Sb 206.836†	30.0	-6.6	-2.0839 ug/L	-2.0839 ppb	13:49:39
3	Se 196.026†	-17.9	-6.1	-3.3434 ug/L	-3.3434 ppb	13:49:39
3	Si 251.611†	607.9	97.2	2.7433 ug/L	2.7433 ppb	13:49:39
3	Sn 189.927†	10.7	3.8	0.6708 ug/L	0.6708 ppb	13:49:39
3	Ti 334.940†	-949.0	-51.5	-0.0698 ug/L	-0.0698 ppb	13:49:19
3	Tl 190.801†	-43.5	4.9	1.5098 ug/L	1.5098 ppb	13:49:39
3	U 409.014†	-1442.9	84.6	2.0094 ug/L	2.0094 ppb	13:49:19
3	V 292.402†	-1425.3	-56.8	-0.3285 ug/L	-0.3285 ppb	13:49:19
3	Zn 213.857†	986.1	-30.8	-0.2738 ug/L	-0.2738 ppb	13:49:39
3	SiO2†	580.7	64.4	3.8966 ug/L	3.8966 ppb	13:49:55

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	942708.8	97.948	%	0.8876				0.91%
Sc Radial	5244.2	97.0	%	1.14				1.18%
Y 371.029	834659.4	97.788	%	0.9624				0.98%
Y RADIAL	5632.1	96.39	%	1.195				1.24%
Ag 328.068†	38.2	0.1575	ug/L	0.14252	0.1575	ppb	0.14252	90.47%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.0	2.8697	ug/L	2.25267	2.8697	ppb	2.25267	78.50%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.2	0.8615	ug/L	1.51301	0.8615	ppb	1.51301	175.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	91.3	1.9367	ug/L	0.63352	1.9367	ppb	0.63352	32.71%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.6	0.0497	ug/L	0.05233	0.0497	ppb	0.05233	105.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-45.4	-0.0156	ug/L	0.03874	-0.0156	ppb	0.03874	248.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.5	24.580	ug/L	5.2035	24.580	ppb	5.2035	21.17%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                1.6      0.0145 ug/L       0.07524      0.0145 ppb        0.07524 519.11%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -3.3     -0.0663 ug/L       0.12278     -0.0663 ppb        0.12278 185.17%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                3.7      0.0381 ug/L       0.08335      0.0381 ppb        0.08335 219.03%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               19.2      0.0536 ug/L       0.15906      0.0536 ppb        0.15906 296.51%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.1      19.014 ug/L        9.6705      19.014 ppb         9.6705  50.86%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        664.7      112.75 ug/L         7.051      112.75 ppb          7.051   6.25%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.2      41.124 ug/L       52.5577      41.124 ppb        52.5577 127.80%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -100.5     -0.1077 ug/L       0.00231     -0.1077 ppb        0.00231   2.15%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                5.9      0.3840 ug/L       0.25982      0.3840 ppb        0.25982  67.67%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      3015.1      879.41 ug/L         7.657      879.41 ppb          7.657   0.87%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -0.0     -0.0011 ug/L       0.30415     -0.0011 ppb        0.30415 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                13.0      6.9199 ug/L       5.26199      6.9199 ppb        5.26199  76.04%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -7.2     -0.8681 ug/L       1.44145     -0.8681 ppb        1.44145 166.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.7     -4.7454 ug/L       3.74640     -4.7454 ppb        3.74640  78.95%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                3.8      1.2247 ug/L       3.93774      1.2247 ppb        3.93774 321.52%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -8.8     -4.8214 ug/L       1.46833     -4.8214 ppb        1.46833  30.45%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               87.7      2.4730 ug/L       0.24191      2.4730 ppb        0.24191   9.78%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                2.8      0.4890 ug/L       0.17632      0.4890 ppb        0.17632  36.05%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               27.4      0.1674 ug/L       0.06480      0.1674 ppb        0.06480  38.70%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -99.4     -0.1414 ug/L       0.06232     -0.1414 ppb        0.06232  44.07%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                7.6      2.3451 ug/L       0.80255      2.3451 ppb        0.80255  34.22%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -49.6     -1.1807 ug/L       2.80959     -1.1807 ppb        2.80959 237.96%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -54.9     -0.3247 ug/L       0.03611     -0.3247 ppb        0.03611  11.12%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -21.2     -0.1903 ug/L       0.16803     -0.1903 ppb        0.16803  88.30%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    105.9      6.4120 ug/L       2.74624      6.4120 ppb        2.74624  42.83%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 3
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/29/2010 14:05:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5178.5	5178.5	95.8	%			14:07:04
1	Y RADIAL	5564.2	5564.2	95.23	%			14:07:04
1	Al 396.153Radial†	6570.3	6858.2	4939.2	ug/L	4939.2	ppb	14:07:04
1	Ca 317.933Radial†	3130.2	3251.3	5142.3	ug/L	5142.3	ppb	14:07:24
1	Fe 238.204 Radial†	571.4	587.1	5214.2	ug/L	5214.2	ppb	14:07:24
1	K 766.490 Radial†	31657.5	30685.8	5214.5	ug/L	5214.5	ppb	14:07:04
1	Mg 279.077 IEC†	151.7	157.1	5275.2	ug/L	5275.2	ppb	14:07:24
1	Na 589.592 Radial†	34915.8	37352.5	10895	ug/L	10895	ppb	14:07:04
1	Sr 421.552†	77809.0	81237.9	497.10	ug/L	497.10	ppb	14:07:04
1	Sc 361.383	957323.4	957323.4	99.466	%			14:08:21
1	Y 371.029	837179.1	837179.1	98.083	%			14:08:21
1	Ag 328.068†	120904.1	121251.4	485.55	ug/L	485.55	ppb	14:08:27
1	As 188.979†	1199.0	1239.5	486.96	ug/L	486.96	ppb	14:08:47
1	B 249.677†	21971.9	22315.4	471.90	ug/L	471.90	ppb	14:08:27
1	Ba 233.527†	64070.6	64414.2	485.07	ug/L	485.07	ppb	14:08:27
1	Be 313.107†	1427303.0	1439968.3	485.80	ug/L	485.80	ppb	14:08:21
1	Cd 226.502†	45882.8	46330.3	488.38	ug/L	488.38	ppb	14:08:27
1	Co 228.616†	23684.7	23888.1	489.11	ug/L	489.11	ppb	14:08:27
1	Cr 267.716†	46641.7	46795.6	483.33	ug/L	483.33	ppb	14:08:27
1	Cu 324.752†	184330.1	176410.0	476.54	ug/L	476.54	ppb	14:08:27
1	Mn 257.610†	455317.9	457086.9	490.99	ug/L	490.99	ppb	14:08:21
1	Mo 202.031†	7367.8	7385.2	482.30	ug/L	482.30	ppb	14:08:47
1	Ni 231.604†	20319.8	20335.7	485.99	ug/L	485.99	ppb	14:08:27
1	P 214.914†	4767.9	4545.1	2335.3	ug/L	2335.3	ppb	14:08:47
1	Pb 220.353†	3995.7	4063.6	488.51	ug/L	488.51	ppb	14:08:47
1	S 181.975 Axial†	786.3	737.3	952.45	ug/L	952.45	ppb	14:08:47
1	Sb 206.836†	1527.8	1499.1	495.98	ug/L	495.98	ppb	14:08:47
1	Se 196.026†	859.7	876.3	506.30	ug/L	506.30	ppb	14:08:47
1	Si 251.611†	85039.9	84979.0	2396.0	ug/L	2396.0	ppb	14:08:27
1	Sn 189.927†	2777.8	2785.7	484.28	ug/L	484.28	ppb	14:08:47
1	Ti 334.940†	340202.2	342935.0	489.30	ug/L	489.30	ppb	14:08:21
1	Tl 190.801†	1525.0	1582.1	489.41	ug/L	489.41	ppb	14:08:47
1	U 409.014†	18772.7	20416.5	483.49	ug/L	483.49	ppb	14:08:27
1	V 292.402†	79390.3	81200.1	488.27	ug/L	488.27	ppb	14:08:27
1	Zn 213.857†	55081.0	54349.0	479.46	ug/L	479.46	ppb	14:08:27
1	SiO2†	86393.0	86334.0	5224.4	ug/L	5224.4	ppb	14:09:54
2	Sc Radial	5087.4	5087.4	94.1	%			14:07:29
2	Y RADIAL	5493.0	5493.0	94.01	%			14:07:29
2	Al 396.153Radial†	6509.7	6916.8	4981.2	ug/L	4981.2	ppb	14:07:29
2	Ca 317.933Radial†	3108.1	3286.4	5197.9	ug/L	5197.9	ppb	14:07:49
2	Fe 238.204 Radial†	567.8	593.9	5275.4	ug/L	5275.4	ppb	14:07:49
2	K 766.490 Radial†	31381.2	30984.7	5265.3	ug/L	5265.3	ppb	14:07:29
2	Mg 279.077 IEC†	151.2	159.4	5353.0	ug/L	5353.0	ppb	14:07:49
2	Na 589.592 Radial†	34338.4	37392.3	10906	ug/L	10906	ppb	14:07:29
2	Sr 421.552†	76897.7	81725.4	500.08	ug/L	500.08	ppb	14:07:29
2	Sc 361.383	945486.9	945486.9	98.237	%			14:08:53
2	Y 371.029	827567.8	827567.8	96.957	%			14:08:53
2	Ag 328.068†	121888.9	123775.5	495.63	ug/L	495.63	ppb	14:08:58
2	As 188.979†	1205.3	1261.0	495.33	ug/L	495.33	ppb	14:09:18
2	B 249.677†	22247.7	22872.8	483.72	ug/L	483.72	ppb	14:08:58
2	Ba 233.527†	64325.6	65480.1	493.10	ug/L	493.10	ppb	14:08:58
2	Be 313.107†	1419788.1	1450282.7	489.27	ug/L	489.27	ppb	14:08:53
2	Cd 226.502†	45806.9	46830.6	493.66	ug/L	493.66	ppb	14:08:58
2	Co 228.616†	23620.7	24121.1	493.89	ug/L	493.89	ppb	14:08:58
2	Cr 267.716†	46838.2	47582.6	491.45	ug/L	491.45	ppb	14:08:58
2	Cu 324.752†	187044.5	181493.2	490.27	ug/L	490.27	ppb	14:08:58
2	Mn 257.610†	451568.2	459000.5	493.05	ug/L	493.05	ppb	14:08:53
2	Mo 202.031†	7383.1	7493.5	489.37	ug/L	489.37	ppb	14:09:18
2	Ni 231.604†	20405.8	20679.0	494.20	ug/L	494.20	ppb	14:08:58

2	P 214.914†	4760.8	4597.9	2360.8 ug/L	2360.8 ppb	14:09:18
2	Pb 220.353†	3978.5	4096.3	492.45 ug/L	492.45 ppb	14:09:18
2	S 181.975 Axial†	787.4	748.3	966.67 ug/L	966.67 ppb	14:09:18
2	Sb 206.836†	1540.2	1531.0	506.38 ug/L	506.38 ppb	14:09:18
2	Se 196.026†	853.6	881.0	509.11 ug/L	509.11 ppb	14:09:18
2	Si 251.611†	85603.4	86622.9	2442.4 ug/L	2442.4 ppb	14:08:58
2	Sn 189.927†	2760.9	2803.5	487.38 ug/L	487.38 ppb	14:09:18
2	Ti 334.940†	336748.8	343701.5	490.38 ug/L	490.38 ppb	14:08:53
2	Tl 190.801†	1525.5	1601.8	495.45 ug/L	495.45 ppb	14:09:18
2	U 409.014†	19257.6	21146.3	500.81 ug/L	500.81 ppb	14:08:58
2	V 292.402†	79758.5	82574.1	496.54 ug/L	496.54 ppb	14:08:58
2	Zn 213.857†	55411.8	55379.0	488.55 ug/L	488.55 ppb	14:08:58
2	SiO2†	85888.5	86907.7	5259.1 ug/L	5259.1 ppb	14:10:00
3	Sc Radial	5181.4	5181.4	95.8 %		14:07:54
3	Y RADIAL	5547.9	5547.9	94.95 %		14:07:54
3	Al 396.153Radial†	6448.7	6727.5	4844.2 ug/L	4844.2 ppb	14:07:54
3	Ca 317.933Radial†	3120.3	3239.2	5123.2 ug/L	5123.2 ppb	14:08:14
3	Fe 238.204 Radial†	566.5	581.6	5166.5 ug/L	5166.5 ppb	14:08:14
3	K 766.490 Radial†	31237.8	30229.4	5136.9 ug/L	5136.9 ppb	14:07:54
3	Mg 279.077 IEC†	152.1	157.4	5287.6 ug/L	5287.6 ppb	14:08:14
3	Na 589.592 Radial†	34225.7	36612.0	10679 ug/L	10679 ppb	14:07:54
3	Sr 421.552†	76536.9	79864.9	488.70 ug/L	488.70 ppb	14:07:54
3	Sc 361.383	946747.1	946747.1	98.367 %		14:09:24
3	Y 371.029	829099.2	829099.2	97.136 %		14:09:24
3	Ag 328.068†	121478.8	123193.5	493.28 ug/L	493.28 ppb	14:09:29
3	As 188.979†	1216.0	1270.2	498.89 ug/L	498.89 ppb	14:09:49
3	B 249.677†	22214.8	22809.1	482.38 ug/L	482.38 ppb	14:09:29
3	Ba 233.527†	64264.6	65330.9	491.97 ug/L	491.97 ppb	14:09:29
3	Be 313.107†	1416636.8	1445155.4	487.54 ug/L	487.54 ppb	14:09:24
3	Cd 226.502†	45895.0	46858.1	493.96 ug/L	493.96 ppb	14:09:29
3	Co 228.616†	23635.0	24103.6	493.54 ug/L	493.54 ppb	14:09:29
3	Cr 267.716†	46811.6	47492.1	490.52 ug/L	490.52 ppb	14:09:29
3	Cu 324.752†	185641.3	179813.3	485.73 ug/L	485.73 ppb	14:09:29
3	Mn 257.610†	450260.4	457059.1	490.95 ug/L	490.95 ppb	14:09:24
3	Mo 202.031†	7423.4	7524.6	491.39 ug/L	491.39 ppb	14:09:49
3	Ni 231.604†	20366.4	20611.4	492.58 ug/L	492.58 ppb	14:09:29
3	P 214.914†	4780.7	4611.7	2369.1 ug/L	2369.1 ppb	14:09:49
3	Pb 220.353†	4003.8	4116.7	494.88 ug/L	494.88 ppb	14:09:49
3	S 181.975 Axial†	792.3	752.2	971.78 ug/L	971.78 ppb	14:09:49
3	Sb 206.836†	1549.7	1538.5	508.88 ug/L	508.88 ppb	14:09:49
3	Se 196.026†	868.5	895.0	516.53 ug/L	516.53 ppb	14:09:49
3	Si 251.611†	85436.0	86336.7	2434.3 ug/L	2434.3 ppb	14:09:29
3	Sn 189.927†	2778.9	2818.1	489.90 ug/L	489.90 ppb	14:09:49
3	Ti 334.940†	335859.9	342341.5	488.44 ug/L	488.44 ppb	14:09:24
3	Tl 190.801†	1519.7	1593.8	492.97 ug/L	492.97 ppb	14:09:49
3	U 409.014†	19018.6	20877.3	494.43 ug/L	494.43 ppb	14:09:29
3	V 292.402†	79661.1	82367.1	495.35 ug/L	495.35 ppb	14:09:29
3	Zn 213.857†	55198.1	55086.7	485.97 ug/L	485.97 ppb	14:09:29
3	SiO2†	85244.8	86137.0	5212.2 ug/L	5212.2 ppb	14:10:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	949852.5	98.690	%	0.6754				0.68%
Sc Radial	5149.1	95.2	%	0.99				1.04%
Y 371.029	831282.0	97.392	%	0.6050				0.62%
Y RADIAL	5535.0	94.73	%	0.639				0.67%
Ag 328.068†	122740.2	491.49	ug/L	5.274	491.49	ppb	5.274	1.07%
QC value within limits for Ag 328.068 Recovery = 98.30%								
Al 396.153Radial†	6834.2	4921.5	ug/L	70.20	4921.5	ppb	70.20	1.43%
QC value within limits for Al 396.153Radial Recovery = 98.43%								
As 188.979†	1256.9	493.73	ug/L	6.122	493.73	ppb	6.122	1.24%
QC value within limits for As 188.979 Recovery = 98.75%								
B 249.677†	22665.8	479.33	ug/L	6.473	479.33	ppb	6.473	1.35%
QC value within limits for B 249.677 Recovery = 95.87%								
Ba 233.527†	65075.1	490.04	ug/L	4.346	490.04	ppb	4.346	0.89%
QC value within limits for Ba 233.527 Recovery = 98.01%								
Be 313.107†	1445135.5	487.54	ug/L	1.737	487.54	ppb	1.737	0.36%
QC value within limits for Be 313.107 Recovery = 97.51%								
Ca 317.933Radial†	3258.9	5154.5	ug/L	38.78	5154.5	ppb	38.78	0.75%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.09%
Cd 226.502†            46673.0      492.00 ug/L         3.137      492.00 ppb          3.137   0.64%
   QC value within limits for Cd 226.502  Recovery = 98.40%
Co 228.616†            24037.6      492.18 ug/L         2.667      492.18 ppb          2.667   0.54%
   QC value within limits for Co 228.616  Recovery = 98.44%
Cr 267.716†            47290.1      488.43 ug/L         4.446      488.43 ppb          4.446   0.91%
   QC value within limits for Cr 267.716  Recovery = 97.69%
Cu 324.752†           179238.9      484.18 ug/L         6.992      484.18 ppb          6.992   1.44%
   QC value within limits for Cu 324.752  Recovery = 96.84%
Fe 238.204 Radial†       587.5      5218.7 ug/L        54.61      5218.7 ppb         54.61   1.05%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.37%
K 766.490 Radial†      30633.3      5205.6 ug/L        64.66      5205.6 ppb         64.66   1.24%
   QC value within limits for K 766.490 Radial  Recovery = 104.11%
Mg 279.077 IEC†          157.9      5305.2 ug/L        41.79      5305.2 ppb         41.79   0.79%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.10%
Mn 257.610†           457715.5      491.66 ug/L         1.198      491.66 ppb          1.198   0.24%
   QC value within limits for Mn 257.610  Recovery = 98.33%
Mo 202.031†             7467.8      487.69 ug/L         4.772      487.69 ppb          4.772   0.98%
   QC value within limits for Mo 202.031  Recovery = 97.54%
Na 589.592 Radial†     37118.9       10826 ug/L       128.2        10826 ppb        128.2   1.18%
   QC value within limits for Na 589.592 Radial  Recovery = 108.26%
Ni 231.604†            20542.1      490.93 ug/L         4.347      490.93 ppb          4.347   0.89%
   QC value within limits for Ni 231.604  Recovery = 98.19%
P 214.914†              4584.9      2355.0 ug/L        17.63      2355.0 ppb         17.63   0.75%
   QC value within limits for P 214.914  Recovery = 94.20%
Pb 220.353†             4092.2      491.95 ug/L         3.211      491.95 ppb          3.211   0.65%
   QC value within limits for Pb 220.353  Recovery = 98.39%
S 181.975 Axial†         745.9      963.63 ug/L        10.020      963.63 ppb         10.020   1.04%
   QC value within limits for S 181.975 Axial  Recovery = 96.36%
Sb 206.836†             1522.8      503.75 ug/L         6.841      503.75 ppb          6.841   1.36%
   QC value within limits for Sb 206.836  Recovery = 100.75%
Se 196.026†              884.1      510.65 ug/L         5.286      510.65 ppb          5.286   1.04%
   QC value within limits for Se 196.026  Recovery = 102.13%
Si 251.611†            85979.5      2424.2 ug/L        24.77      2424.2 ppb         24.77   1.02%
   QC value within limits for Si 251.611  Recovery = 96.97%
Sn 189.927†             2802.4      487.19 ug/L         2.815      487.19 ppb          2.815   0.58%
   QC value within limits for Sn 189.927  Recovery = 97.44%
Sr 421.552†            80942.7      495.29 ug/L         5.903      495.29 ppb          5.903   1.19%
   QC value within limits for Sr 421.552  Recovery = 99.06%
Ti 334.940†           342992.7      489.37 ug/L         0.973      489.37 ppb          0.973   0.20%
   QC value within limits for Ti 334.940  Recovery = 97.87%
Tl 190.801†             1592.5      492.61 ug/L         3.035      492.61 ppb          3.035   0.62%
   QC value within limits for Tl 190.801  Recovery = 98.52%
U 409.014†             20813.3      492.91 ug/L         8.759      492.91 ppb          8.759   1.78%
   QC value within limits for U 409.014  Recovery = 98.58%
V 292.402†             82047.1      493.39 ug/L         4.473      493.39 ppb          4.473   0.91%
   QC value within limits for V 292.402  Recovery = 98.68%
Zn 213.857†            54938.2      484.66 ug/L         4.685      484.66 ppb          4.685   0.97%
   QC value within limits for Zn 213.857  Recovery = 96.93%
SiO2†                  86459.6      5231.9 ug/L        24.28      5231.9 ppb         24.28   0.46%
   QC value within limits for SiO2  Recovery = 97.84%
All analyte(s) passed QC.
```

Sequence No.: 4
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/29/2010 14:12:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5307.9	5307.9	98.2	%			14:14:07
1	Y RADIAL	5675.5	5675.5	97.14	%			14:14:07
1	Al 396.153Radial†	13.1	10.4	7.4817	ug/L	7.4817	ppb	14:14:27
1	Ca 317.933Radial†	32.1	15.2	24.006	ug/L	24.006	ppb	14:14:27
1	Fe 238.204 Radial†	7.6	-1.9	-16.726	ug/L	-16.726	ppb	14:14:27
1	K 766.490 Radial†	2576.5	251.2	42.554	ug/L	42.554	ppb	14:14:07
1	Mg 279.077 IEC†	1.8	0.5	18.182	ug/L	18.182	ppb	14:14:27
1	Na 589.592 Radial†	706.0	1609.6	469.46	ug/L	469.46	ppb	14:14:07
1	Sr 421.552†	48.0	31.6	0.1930	ug/L	0.1930	ppb	14:14:07
1	Sc 361.383	953931.5	953931.5	99.114	%			14:15:24
1	Y 371.029	844480.1	844480.1	98.938	%			14:15:24
1	Ag 328.068†	360.5	62.3	0.2437	ug/L	0.2437	ppb	14:15:29
1	As 188.979†	-26.7	7.1	2.7489	ug/L	2.7489	ppb	14:15:49
1	B 249.677†	-77.5	147.4	3.1356	ug/L	3.1356	ppb	14:15:49
1	Ba 233.527†	-12.7	-13.0	-0.0977	ug/L	-0.0977	ppb	14:15:49
1	Be 313.107†	-5044.4	-81.5	-0.0273	ug/L	-0.0273	ppb	14:15:29
1	Cd 226.502†	-192.8	6.9	0.0743	ug/L	0.0743	ppb	14:15:49
1	Co 228.616†	-80.1	-4.5	-0.0917	ug/L	-0.0917	ppb	14:15:49
1	Cr 267.716†	93.5	-2.0	-0.0201	ug/L	-0.0201	ppb	14:15:49
1	Cu 324.752†	8808.2	-22.0	-0.0596	ug/L	-0.0596	ppb	14:15:29
1	Mn 257.610†	537.7	-131.3	-0.1433	ug/L	-0.1433	ppb	14:15:49
1	Mo 202.031†	25.6	3.7	0.2428	ug/L	0.2428	ppb	14:15:49
1	Ni 231.604†	87.9	-4.3	-0.1034	ug/L	-0.1034	ppb	14:15:49
1	P 214.914†	253.1	7.0	3.7650	ug/L	3.7650	ppb	14:15:49
1	Pb 220.353†	-43.8	2.2	0.2660	ug/L	0.2660	ppb	14:15:49
1	S 181.975 Axial†	52.2	-0.6	-0.8183	ug/L	-0.8183	ppb	14:15:49
1	Sb 206.836†	46.2	9.7	3.1050	ug/L	3.1050	ppb	14:15:49
1	Se 196.026†	-6.2	5.8	3.1544	ug/L	3.1544	ppb	14:15:49
1	Si 251.611†	524.7	12.1	0.3403	ug/L	0.3403	ppb	14:15:49
1	Sn 189.927†	9.3	2.4	0.4257	ug/L	0.4257	ppb	14:15:49
1	Ti 334.940†	-872.6	27.3	0.0412	ug/L	0.0412	ppb	14:15:29
1	Tl 190.801†	-42.6	5.9	1.8072	ug/L	1.8072	ppb	14:15:49
1	U 409.014†	-1580.0	-51.0	-1.2109	ug/L	-1.2109	ppb	14:15:29
1	V 292.402†	-1349.7	22.2	0.1354	ug/L	0.1354	ppb	14:15:29
1	Zn 213.857†	953.3	-65.7	-0.5823	ug/L	-0.5823	ppb	14:15:49
1	SiO2†	526.9	9.1	0.5431	ug/L	0.5431	ppb	14:16:55
2	Sc Radial	5320.0	5320.0	98.4	%			14:14:32
2	Y RADIAL	5716.0	5716.0	97.83	%			14:14:32
2	Al 396.153Radial†	5.5	2.6	1.8748	ug/L	1.8748	ppb	14:14:52
2	Ca 317.933Radial†	27.6	10.5	16.676	ug/L	16.676	ppb	14:14:52
2	Fe 238.204 Radial†	11.2	1.8	16.156	ug/L	16.156	ppb	14:14:52
2	K 766.490 Radial†	2637.4	307.2	52.077	ug/L	52.077	ppb	14:14:32
2	Mg 279.077 IEC†	2.6	1.4	45.555	ug/L	45.555	ppb	14:14:52
2	Na 589.592 Radial†	713.3	1615.3	471.14	ug/L	471.14	ppb	14:14:32
2	Sr 421.552†	25.3	8.3	0.0508	ug/L	0.0508	ppb	14:14:32
2	Sc 361.383	959463.7	959463.7	99.689	%			14:15:54
2	Y 371.029	850107.1	850107.1	99.598	%			14:15:54
2	Ag 328.068†	333.3	33.0	0.1370	ug/L	0.1370	ppb	14:15:59
2	As 188.979†	-37.9	-4.0	-1.5554	ug/L	-1.5554	ppb	14:16:19
2	B 249.677†	-126.6	98.7	2.0937	ug/L	2.0937	ppb	14:16:19
2	Ba 233.527†	1.7	1.6	0.0132	ug/L	0.0132	ppb	14:16:19
2	Be 313.107†	-4932.9	59.6	0.0201	ug/L	0.0201	ppb	14:15:59
2	Cd 226.502†	-197.7	3.1	0.0313	ug/L	0.0313	ppb	14:16:19
2	Co 228.616†	-58.8	17.4	0.3550	ug/L	0.3550	ppb	14:16:19
2	Cr 267.716†	90.8	-5.3	-0.0537	ug/L	-0.0537	ppb	14:16:19
2	Cu 324.752†	8807.3	-74.1	-0.1997	ug/L	-0.1997	ppb	14:15:59
2	Mn 257.610†	542.6	-129.5	-0.1393	ug/L	-0.1393	ppb	14:16:19
2	Mo 202.031†	21.8	-0.2	-0.0107	ug/L	-0.0107	ppb	14:16:19
2	Ni 231.604†	96.8	4.1	0.0974	ug/L	0.0974	ppb	14:16:19

2	P 214.914†	258.4	10.8	5.8161 ug/L	5.8161 ppb	14:16:19
2	Pb 220.353†	-60.4	-14.1	-1.6940 ug/L	-1.6940 ppb	14:16:19
2	S 181.975 Axial†	42.2	-10.9	-14.092 ug/L	-14.092 ppb	14:16:19
2	Sb 206.836†	44.8	8.1	2.6020 ug/L	2.6020 ppb	14:16:19
2	Se 196.026†	-10.6	1.4	0.8395 ug/L	0.8395 ppb	14:16:19
2	Si 251.611†	528.8	13.2	0.3735 ug/L	0.3735 ppb	14:16:19
2	Sn 189.927†	16.5	9.6	1.6703 ug/L	1.6703 ppb	14:16:19
2	Ti 334.940†	-887.6	17.3	0.0230 ug/L	0.0230 ppb	14:15:59
2	Tl 190.801†	-37.6	11.1	3.4156 ug/L	3.4156 ppb	14:16:19
2	U 409.014†	-1508.0	30.3	0.7191 ug/L	0.7191 ppb	14:15:59
2	V 292.402†	-1317.5	62.3	0.3693 ug/L	0.3693 ppb	14:15:59
2	Zn 213.857†	940.8	-83.8	-0.7477 ug/L	-0.7477 ppb	14:16:19
2	SiO2†	542.8	22.0	1.3321 ug/L	1.3321 ppb	14:17:00
3	Sc Radial	5287.0	5287.0	97.8 %		14:14:57
3	Y RADIAL	5690.9	5690.9	97.40 %		14:14:57
3	Al 396.153Radial†	12.9	10.2	7.3660 ug/L	7.3660 ppb	14:15:17
3	Ca 317.933Radial†	34.6	17.9	28.275 ug/L	28.275 ppb	14:15:17
3	Fe 238.204 Radial†	7.9	-1.6	-13.732 ug/L	-13.732 ppb	14:15:17
3	K 766.490 Radial†	2628.3	314.6	53.334 ug/L	53.334 ppb	14:14:57
3	Mg 279.077 IEC†	3.5	2.3	77.018 ug/L	77.018 ppb	14:15:17
3	Na 589.592 Radial†	770.4	1678.4	489.53 ug/L	489.53 ppb	14:14:57
3	Sr 421.552†	-5.2	-22.7	-0.1391 ug/L	-0.1391 ppb	14:14:57
3	Sc 361.383	947929.7	947929.7	98.490 %		14:16:24
3	Y 371.029	839724.1	839724.1	98.381 %		14:16:24
3	Ag 328.068†	386.6	91.1	0.3606 ug/L	0.3606 ppb	14:16:30
3	As 188.979†	-30.2	3.4	1.3182 ug/L	1.3182 ppb	14:16:50
3	B 249.677†	-129.9	93.8	1.9950 ug/L	1.9950 ppb	14:16:50
3	Ba 233.527†	-11.0	-11.4	-0.0864 ug/L	-0.0864 ppb	14:16:50
3	Be 313.107†	-4840.9	92.8	0.0313 ug/L	0.0313 ppb	14:16:30
3	Cd 226.502†	-208.5	-10.3	-0.1082 ug/L	-0.1082 ppb	14:16:50
3	Co 228.616†	-69.5	5.8	0.1186 ug/L	0.1186 ppb	14:16:50
3	Cr 267.716†	84.4	-10.6	-0.1085 ug/L	-0.1085 ppb	14:16:50
3	Cu 324.752†	8814.7	40.9	0.1124 ug/L	0.1124 ppb	14:16:30
3	Mn 257.610†	564.5	-100.6	-0.1125 ug/L	-0.1125 ppb	14:16:50
3	Mo 202.031†	19.8	-2.0	-0.1321 ug/L	-0.1321 ppb	14:16:50
3	Ni 231.604†	90.5	-1.2	-0.0279 ug/L	-0.0279 ppb	14:16:50
3	P 214.914†	243.6	-1.1	-0.5812 ug/L	-0.5812 ppb	14:16:50
3	Pb 220.353†	-42.7	3.1	0.3752 ug/L	0.3752 ppb	14:16:50
3	S 181.975 Axial†	53.0	0.5	0.6607 ug/L	0.6607 ppb	14:16:50
3	Sb 206.836†	34.0	-2.4	-0.7694 ug/L	-0.7694 ppb	14:16:50
3	Se 196.026†	-14.5	-2.7	-1.5305 ug/L	-1.5305 ppb	14:16:50
3	Si 251.611†	538.0	29.0	0.8212 ug/L	0.8212 ppb	14:16:50
3	Sn 189.927†	9.1	2.3	0.4088 ug/L	0.4088 ppb	14:16:50
3	Ti 334.940†	-889.0	5.0	0.0068 ug/L	0.0068 ppb	14:16:30
3	Tl 190.801†	-42.9	5.3	1.6392 ug/L	1.6392 ppb	14:16:50
3	U 409.014†	-1723.1	-206.5	-4.9049 ug/L	-4.9049 ppb	14:16:30
3	V 292.402†	-1410.8	-48.6	-0.2960 ug/L	-0.2960 ppb	14:16:30
3	Zn 213.857†	954.8	-58.0	-0.5150 ug/L	-0.5150 ppb	14:16:50
3	SiO2†	556.5	42.5	2.5802 ug/L	2.5802 ppb	14:17:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	953775.0	99.098	%	0.5994				0.60%
Sc Radial	5305.0	98.1	%	0.31				0.32%
Y 371.029	844770.5	98.972	%	0.6089				0.62%
Y RADIAL	5694.1	97.46	%	0.350				0.36%
Ag 328.068†	62.1	0.2471	ug/L	0.11184	0.2471	ppb	0.11184	45.26%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.7	5.5741	ug/L	3.20424	5.5741	ppb	3.20424	57.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.2	0.8372	ug/L	2.19206	0.8372	ppb	2.19206	261.83%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	113.3	2.4081	ug/L	0.63198	2.4081	ppb	0.63198	26.24%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-7.6	-0.0570	ug/L	0.06104	-0.0570	ppb	0.06104	107.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	23.6	0.0080	ug/L	0.03112	0.0080	ppb	0.03112	388.53%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	14.5	22.986	ug/L	5.8662	22.986	ppb	5.8662	25.52%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                -0.1     -0.0009 ug/L       0.09540     -0.0009 ppb        0.09540 >999.9%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 6.2      0.1273 ug/L       0.22349      0.1273 ppb        0.22349 175.53%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -6.0     -0.0608 ug/L       0.04462     -0.0608 ppb        0.04462  73.42%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -18.4     -0.0489 ug/L       0.15633     -0.0489 ppb        0.15633 319.39%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -0.5     -4.7673 ug/L      18.18190     -4.7673 ppb       18.18190 381.39%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         291.0      49.322 ug/L        5.8943      49.322 ppb         5.8943  11.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             1.4      46.918 ug/L       29.4418      46.918 ppb        29.4418  62.75%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -120.5     -0.1317 ug/L       0.01674     -0.1317 ppb        0.01674  12.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.5      0.0333 ug/L       0.19128      0.0333 ppb        0.19128 574.11%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       1634.4      476.71 ug/L        11.133      476.71 ppb         11.133   2.34%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -0.5     -0.0113 ug/L       0.10144     -0.0113 ppb        0.10144 898.68%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  5.6      3.0000 ug/L       3.26654      3.0000 ppb        3.26654 108.89%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -2.9     -0.3509 ug/L       1.16444     -0.3509 ppb        1.16444 331.80%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -3.7     -4.7498 ug/L       8.12413     -4.7498 ppb        8.12413 171.04%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 5.1      1.6459 ug/L       2.10674      1.6459 ppb        2.10674 128.00%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.5      0.8211 ug/L       2.34250      0.8211 ppb        2.34250 285.29%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                18.1      0.5117 ug/L       0.26862      0.5117 ppb        0.26862  52.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.8      0.8350 ug/L       0.72350      0.8350 ppb        0.72350  86.65%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 5.7      0.0349 ug/L       0.16662      0.0349 ppb        0.16662 477.28%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                16.5      0.0237 ug/L       0.01719      0.0237 ppb        0.01719  72.62%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 7.4      2.2873 ug/L       0.98071      2.2873 ppb        0.98071  42.88%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                -75.7     -1.7989 ug/L       2.85770     -1.7989 ppb        2.85770 158.86%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 12.0      0.0696 ug/L       0.33748      0.0696 ppb        0.33748 485.11%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -69.2     -0.6150 ug/L       0.11973     -0.6150 ppb        0.11973  19.47%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      24.5      1.4852 ug/L       1.02713      1.4852 ppb        1.02713  69.16%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 5
Sample ID: 1202011875|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 1/29/2010 14:19:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011875|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5576.4	5576.4	103	%			14:21:30
1	Y RADIAL	6625.1	6625.1	113.4	%			14:21:30
1	Al 396.153Radial†	128774.2	124879.7	90336	ug/L	90336	ppb	14:21:09
1	Ca 317.933Radial†	68802.4	66705.7	105500	ug/L	105500	ppb	14:21:09
1	Fe 238.204 Radial†	21015.1	20370.4	180450	ug/L	180450	ppb	14:21:09
1	K 766.490 Radial†	264266.5	253906.9	43160	ug/L	43160	ppb	14:21:09
1	Mg 279.077 IEC†	1175.2	1138.4	38055	ug/L	38055	ppb	14:21:30
1	Na 589.592 Radial†	43204.4	42789.1	12480	ug/L	12480	ppb	14:21:09
1	Sr 421.552†	418610.4	405943.0	2483.4	ug/L	2483.4	ppb	14:21:09
1	Sc 361.383	976080.9	976080.9	101.42	%			14:22:31
1	Y 371.029	940059.8	940059.8	110.14	%			14:22:31
1	Ag 328.068†	65745.6	64526.7	318.84	ug/L	318.84	ppb	14:22:31
1	As 188.979†	2636.5	2633.8	1113.7	ug/L	1113.7	ppb	14:22:36
1	B 249.677†	75944.3	75110.1	1563.8	ug/L	1563.8	ppb	14:22:31
1	Ba 233.527†	256223.9	252648.1	1906.0	ug/L	1906.0	ppb	14:22:31
1	Be 313.107†	2416605.0	2387888.5	816.09	ug/L	816.09	ppb	14:22:31
1	Cd 226.502†	61235.2	60582.0	621.03	ug/L	621.03	ppb	14:22:36
1	Co 228.616†	48871.6	48265.9	975.17	ug/L	975.17	ppb	14:22:36
1	Cr 267.716†	249709.5	246128.4	2544.3	ug/L	2544.3	ppb	14:22:31
1	Cu 324.752†	749971.5	730596.5	1983.2	ug/L	1983.2	ppb	14:22:31
1	Mn 257.610†	5044643.7	4973570.4	5355.5	ug/L	5355.5	ppb	14:22:31
1	Mo 202.031†	8141.3	8005.6	537.57	ug/L	537.57	ppb	14:22:36
1	Ni 231.604†	60569.7	59631.4	1425.4	ug/L	1425.4	ppb	14:22:36
1	P 214.914†	15919.0	15448.4	7748.4	ug/L	7748.4	ppb	14:22:36
1	Pb 220.353†	6982.0	6931.0	834.75	ug/L	834.75	ppb	14:22:36
1	S 181.975 Axial†	3322.0	3222.4	4150.0	ug/L	4150.0	ppb	14:22:36
1	Sb 206.836†	4323.5	4226.3	1364.0	ug/L	1364.0	ppb	14:22:36
1	Se 196.026†	5067.4	5008.7	3389.3	ug/L	3389.3	ppb	14:22:36
1	Si 251.611†	1474825.6	1453726.7	41083	ug/L	41083	ppb	14:22:31
1	Sn 189.927†	5873.5	5784.6	1022.9	ug/L	1022.9	ppb	14:22:36
1	Ti 334.940†	3862110.8	3809121.6	5446.4	ug/L	5446.4	ppb	14:22:31
1	Tl 190.801†	3914.2	3908.4	1264.7	ug/L	1264.7	ppb	14:22:36
1	U 409.014†	-7487.5	-5840.0	-165.03	ug/L	-165.03	ppb	14:22:31
1	V 292.402†	210797.2	209239.3	1216.6	ug/L	1216.6	ppb	14:22:31
1	Zn 213.857†	681948.8	671404.5	5946.2	ug/L	5946.2	ppb	14:22:31
1	SiO2†	1480081.3	1458903.8	88492	ug/L	88492	ppb	14:23:11
2	Sc Radial	5619.2	5619.2	104	%			14:21:55
2	Y RADIAL	6662.0	6662.0	114.0	%			14:21:55
2	Al 396.153Radial†	124271.8	119595.7	86513	ug/L	86513	ppb	14:21:35
2	Ca 317.933Radial†	66675.7	64150.9	101460	ug/L	101460	ppb	14:21:35
2	Fe 238.204 Radial†	20404.5	19627.7	173870	ug/L	173870	ppb	14:21:35
2	K 766.490 Radial†	254947.2	242986.5	41303	ug/L	41303	ppb	14:21:35
2	Mg 279.077 IEC†	1174.7	1129.2	37755	ug/L	37755	ppb	14:21:55
2	Na 589.592 Radial†	41384.5	40718.6	11876	ug/L	11876	ppb	14:21:35
2	Sr 421.552†	401039.6	385941.8	2361.0	ug/L	2361.0	ppb	14:21:35
2	Sc 361.383	975692.6	975692.6	101.37	%			14:22:45
2	Y 371.029	939832.9	939832.9	110.11	%			14:22:45
2	Ag 328.068†	65704.8	64512.3	316.71	ug/L	316.71	ppb	14:22:45
2	As 188.979†	2600.1	2598.9	1098.5	ug/L	1098.5	ppb	14:22:50
2	B 249.677†	75921.5	75117.5	1565.0	ug/L	1565.0	ppb	14:22:45
2	Ba 233.527†	255754.4	252285.5	1903.1	ug/L	1903.1	ppb	14:22:45
2	Be 313.107†	2414435.5	2386696.9	815.69	ug/L	815.69	ppb	14:22:45
2	Cd 226.502†	60780.6	60157.6	617.23	ug/L	617.23	ppb	14:22:50
2	Co 228.616†	48438.7	47858.0	966.91	ug/L	966.91	ppb	14:22:50
2	Cr 267.716†	249349.0	245870.8	2541.6	ug/L	2541.6	ppb	14:22:45
2	Cu 324.752†	749660.9	730584.5	1982.8	ug/L	1982.8	ppb	14:22:45
2	Mn 257.610†	5037925.6	4968923.2	5349.9	ug/L	5349.9	ppb	14:22:45
2	Mo 202.031†	8109.3	7977.2	535.16	ug/L	535.16	ppb	14:22:50
2	Ni 231.604†	60071.9	59164.1	1414.2	ug/L	1414.2	ppb	14:22:50

2	P 214.914†	15855.9	15392.4	7722.7	ug/L	7722.7 ppb	14:22:50
2	Pb 220.353†	6951.7	6903.9	831.23	ug/L	831.23 ppb	14:22:50
2	S 181.975 Axial†	3288.3	3190.4	4109.3	ug/L	4109.3 ppb	14:22:50
2	Sb 206.836†	4324.8	4229.2	1364.6	ug/L	1364.6 ppb	14:22:50
2	Se 196.026†	5020.3	4964.3	3342.6	ug/L	3342.6 ppb	14:22:50
2	Si 251.611†	1473661.9	1453157.7	41067	ug/L	41067 ppb	14:22:45
2	Sn 189.927†	5786.7	5701.2	1007.7	ug/L	1007.7 ppb	14:22:50
2	Ti 334.940†	3859844.0	3808401.2	5444.9	ug/L	5444.9 ppb	14:22:45
2	Tl 190.801†	3840.7	3837.5	1242.9	ug/L	1242.9 ppb	14:22:50
2	U 409.014†	-7535.5	-5890.3	-165.47	ug/L	-165.47 ppb	14:22:45
2	V 292.402†	210528.9	209057.4	1216.5	ug/L	1216.5 ppb	14:22:45
2	Zn 213.857†	681031.9	670767.7	5941.2	ug/L	5941.2 ppb	14:22:45
2	SiO2†	1481589.8	1460972.7	88618	ug/L	88618 ppb	14:23:17
3	Sc Radial	5595.9	5595.9	103	%		14:22:20
3	Y RADIAL	6625.2	6625.2	113.4	%		14:22:20
3	Al 396.153Radial†	126728.4	122468.3	88591	ug/L	88591 ppb	14:22:00
3	Ca 317.933Radial†	67843.2	65546.7	103670	ug/L	103670 ppb	14:22:00
3	Fe 238.204 Radial†	20735.3	20029.2	177430	ug/L	177430 ppb	14:22:00
3	K 766.490 Radial†	259701.3	248603.8	42258	ug/L	42258 ppb	14:22:00
3	Mg 279.077 IEC†	1171.9	1131.2	37818	ug/L	37818 ppb	14:22:20
3	Na 589.592 Radial†	42320.9	41789.6	12189	ug/L	12189 ppb	14:22:00
3	Sr 421.552†	409430.9	395660.1	2420.5	ug/L	2420.5 ppb	14:22:00
3	Sc 361.383	974408.5	974408.5	101.24	%		14:23:00
3	Y 371.029	939559.1	939559.1	110.08	%		14:23:00
3	Ag 328.068†	65554.3	64449.0	317.57	ug/L	317.57 ppb	14:23:00
3	As 188.979†	2626.7	2628.5	1111.0	ug/L	1111.0 ppb	14:23:05
3	B 249.677†	75879.1	75174.2	1565.6	ug/L	1565.6 ppb	14:23:00
3	Ba 233.527†	255610.3	252475.6	1904.6	ug/L	1904.6 ppb	14:23:00
3	Be 313.107†	2412245.7	2387672.5	816.03	ug/L	816.03 ppb	14:23:00
3	Cd 226.502†	61226.6	60677.2	622.35	ug/L	622.35 ppb	14:23:05
3	Co 228.616†	48789.9	48268.0	975.26	ug/L	975.26 ppb	14:23:05
3	Cr 267.716†	248739.5	245592.9	2538.8	ug/L	2538.8 ppb	14:23:00
3	Cu 324.752†	748903.4	730810.7	1983.6	ug/L	1983.6 ppb	14:23:00
3	Mn 257.610†	5029967.0	4967611.2	5348.8	ug/L	5348.8 ppb	14:23:00
3	Mo 202.031†	8199.3	8076.6	541.95	ug/L	541.95 ppb	14:23:05
3	Ni 231.604†	60592.3	59756.2	1428.4	ug/L	1428.4 ppb	14:23:05
3	P 214.914†	15927.6	15483.9	7769.2	ug/L	7769.2 ppb	14:23:05
3	Pb 220.353†	6934.4	6895.8	830.42	ug/L	830.42 ppb	14:23:05
3	S 181.975 Axial†	3314.9	3220.9	4148.4	ug/L	4148.4 ppb	14:23:05
3	Sb 206.836†	4326.5	4236.6	1367.3	ug/L	1367.3 ppb	14:23:05
3	Se 196.026†	5064.0	5013.9	3382.1	ug/L	3382.1 ppb	14:23:05
3	Si 251.611†	1472339.0	1453766.6	41085	ug/L	41085 ppb	14:23:00
3	Sn 189.927†	5850.2	5771.5	1020.3	ug/L	1020.3 ppb	14:23:05
3	Ti 334.940†	3858445.2	3812037.1	5450.3	ug/L	5450.3 ppb	14:23:00
3	Tl 190.801†	3892.1	3893.2	1260.1	ug/L	1260.1 ppb	14:23:05
3	U 409.014†	-7369.9	-5736.4	-162.21	ug/L	-162.21 ppb	14:23:00
3	V 292.402†	210216.8	209022.8	1215.8	ug/L	1215.8 ppb	14:23:00
3	Zn 213.857†	680052.4	670685.4	5940.1	ug/L	5940.1 ppb	14:23:00
3	SiO2†	1492147.8	1473327.2	89367	ug/L	89367 ppb	14:23:23

Mean Data: 1202011875|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	975394.0	101.34	%	0.091				0.09%
Sc Radial	5597.2	103	%	0.4				0.38%
Y 371.029	939817.3	110.11	%	0.029				0.03%
Y RADIAL	6637.4	113.6	%	0.36				0.32%
Ag 328.068†	64496.0	317.71	ug/L	1.074	317.71	ppb	1.074	0.34%
Al 396.153Radial†	122314.6	88480	ug/L	1914.1	88480	ppb	1914.1	2.16%
As 188.979†	2620.4	1107.7	ug/L	8.08	1107.7	ppb	8.08	0.73%
B 249.677†	75134.0	1564.8	ug/L	0.95	1564.8	ppb	0.95	0.06%
Ba 233.527†	252469.7	1904.6	ug/L	1.46	1904.6	ppb	1.46	0.08%
Be 313.107†	2387419.3	815.94	ug/L	0.217	815.94	ppb	0.217	0.03%
Ca 317.933Radial†	65467.8	103550	ug/L	2023.3	103550	ppb	2023.3	1.95%
Cd 226.502†	60472.3	620.21	ug/L	2.659	620.21	ppb	2.659	0.43%
Co 228.616†	48130.6	972.44	ug/L	4.794	972.44	ppb	4.794	0.49%
Cr 267.716†	245864.1	2541.5	ug/L	2.79	2541.5	ppb	2.79	0.11%
Cu 324.752†	730663.9	1983.2	ug/L	0.40	1983.2	ppb	0.40	0.02%
Fe 238.204 Radial†	20009.1	177250	ug/L	3293.0	177250	ppb	3293.0	1.86%
K 766.490 Radial†	248499.1	42240	ug/L	928.4	42240	ppb	928.4	2.20%

Mg 279.077 IEC†	1132.9	37876	ug/L	158.1	37876	ppb	158.1	0.42%
Mn 257.610†	4970034.9	5351.4	ug/L	3.59	5351.4	ppb	3.59	0.07%
Mo 202.031†	8019.8	538.23	ug/L	3.441	538.23	ppb	3.441	0.64%
Na 589.592 Radial†	41765.8	12182	ug/L	302.0	12182	ppb	302.0	2.48%
Ni 231.604†	59517.2	1422.6	ug/L	7.46	1422.6	ppb	7.46	0.52%
P 214.914†	15441.6	7746.8	ug/L	23.30	7746.8	ppb	23.30	0.30%
Pb 220.353†	6910.2	832.13	ug/L	2.302	832.13	ppb	2.302	0.28%
S 181.975 Axial†	3211.2	4135.9	ug/L	23.04	4135.9	ppb	23.04	0.56%
Sb 206.836†	4230.7	1365.3	ug/L	1.76	1365.3	ppb	1.76	0.13%
Se 196.026†	4995.7	3371.3	ug/L	25.15	3371.3	ppb	25.15	0.75%
Si 251.611†	1453550.3	41078	ug/L	9.6	41078	ppb	9.6	0.02%
Sn 189.927†	5752.4	1016.9	ug/L	8.12	1016.9	ppb	8.12	0.80%
Sr 421.552†	395848.3	2421.6	ug/L	61.19	2421.6	ppb	61.19	2.53%
Ti 334.940†	3809853.3	5447.2	ug/L	2.83	5447.2	ppb	2.83	0.05%
Tl 190.801†	3879.7	1255.9	ug/L	11.47	1255.9	ppb	11.47	0.91%
U 409.014†	-5822.2	-164.24	ug/L	1.767	-164.24	ppb	1.767	1.08%
V 292.402†	209106.5	1216.3	ug/L	0.41	1216.3	ppb	0.41	0.03%
Zn 213.857†	670952.6	5942.5	ug/L	3.25	5942.5	ppb	3.25	0.05%
SiO2†	1464401.2	88826	ug/L	473.1	88826	ppb	473.1	0.53%

Sequence No.: 7
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/29/2010 14:31:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5069.1	5069.1	93.7	%			14:33:46
1	Y RADIAL	5460.3	5460.3	93.45	%			14:33:46
1	Al 396.153Radial†	6459.6	6888.3	4960.4	ug/L	4960.4	ppb	14:33:46
1	Ca 317.933Radial†	3098.9	3288.4	5201.1	ug/L	5201.1	ppb	14:34:06
1	Fe 238.204 Radial†	576.6	605.5	5377.6	ug/L	5377.6	ppb	14:34:06
1	K 766.490 Radial†	31552.9	31287.9	5316.8	ug/L	5316.8	ppb	14:33:46
1	Mg 279.077 IEC†	148.6	157.2	5279.8	ug/L	5279.8	ppb	14:34:06
1	Na 589.592 Radial†	34802.7	38019.0	11089	ug/L	11089	ppb	14:33:46
1	Sr 421.552†	77742.5	82921.0	507.40	ug/L	507.40	ppb	14:33:46
1	Sc 361.383	942728.8	942728.8	97.950	%			14:35:03
1	Y 371.029	827129.7	827129.7	96.906	%			14:35:03
1	Ag 328.068†	121764.9	124012.0	496.61	ug/L	496.61	ppb	14:35:09
1	As 188.979†	1214.1	1273.6	500.28	ug/L	500.28	ppb	14:35:29
1	B 249.677†	22651.4	23351.2	493.86	ug/L	493.86	ppb	14:35:09
1	Ba 233.527†	64205.7	65549.3	493.62	ug/L	493.62	ppb	14:35:09
1	Be 313.107†	1426902.7	1461774.7	493.15	ug/L	493.15	ppb	14:35:03
1	Cd 226.502†	45663.0	46820.1	493.54	ug/L	493.54	ppb	14:35:09
1	Co 228.616†	23620.3	24191.0	495.32	ug/L	495.32	ppb	14:35:09
1	Cr 267.716†	46751.0	47633.2	491.98	ug/L	491.98	ppb	14:35:09
1	Cu 324.752†	186736.5	181735.8	490.93	ug/L	490.93	ppb	14:35:09
1	Mn 257.610†	451980.0	460765.8	494.95	ug/L	494.95	ppb	14:35:03
1	Mo 202.031†	7422.4	7555.7	493.44	ug/L	493.44	ppb	14:35:29
1	Ni 231.604†	20316.1	20648.3	493.46	ug/L	493.46	ppb	14:35:09
1	P 214.914†	4763.5	4614.8	2369.6	ug/L	2369.6	ppb	14:35:29
1	Pb 220.353†	3993.1	4123.1	495.66	ug/L	495.66	ppb	14:35:29
1	S 181.975 Axial†	792.5	755.8	976.36	ug/L	976.36	ppb	14:35:29
1	Sb 206.836†	1539.8	1535.1	507.80	ug/L	507.80	ppb	14:35:29
1	Se 196.026†	866.2	896.4	518.05	ug/L	518.05	ppb	14:35:29
1	Si 251.611†	85822.2	87101.2	2455.9	ug/L	2455.9	ppb	14:35:09
1	Sn 189.927†	2757.8	2808.6	488.26	ug/L	488.26	ppb	14:35:29
1	Ti 334.940†	338278.3	346265.9	494.05	ug/L	494.05	ppb	14:35:03
1	Tl 190.801†	1538.9	1620.0	501.07	ug/L	501.07	ppb	14:35:29
1	U 409.014†	19203.9	21148.9	500.86	ug/L	500.86	ppb	14:35:09
1	V 292.402†	79767.3	82820.7	498.04	ug/L	498.04	ppb	14:35:09
1	Zn 213.857†	55374.4	55505.9	489.67	ug/L	489.67	ppb	14:35:09
1	SiO2†	85257.0	86518.9	5235.4	ug/L	5235.4	ppb	14:36:36
2	Sc Radial	5072.4	5072.4	93.8	%			14:34:11
2	Y RADIAL	5466.2	5466.2	93.55	%			14:34:11
2	Al 396.153Radial†	6599.0	7032.4	5064.5	ug/L	5064.5	ppb	14:34:11
2	Ca 317.933Radial†	3137.2	3327.2	5262.4	ug/L	5262.4	ppb	14:34:31
2	Fe 238.204 Radial†	579.3	608.1	5400.6	ug/L	5400.6	ppb	14:34:31
2	K 766.490 Radial†	32088.4	31837.0	5410.1	ug/L	5410.1	ppb	14:34:11
2	Mg 279.077 IEC†	149.7	158.3	5315.4	ug/L	5315.4	ppb	14:34:31
2	Na 589.592 Radial†	35559.4	38801.6	11317	ug/L	11317	ppb	14:34:11
2	Sr 421.552†	79527.4	84769.9	518.71	ug/L	518.71	ppb	14:34:11
2	Sc 361.383	936442.9	936442.9	97.297	%			14:35:35
2	Y 371.029	820502.0	820502.0	96.129	%			14:35:35
2	Ag 328.068†	122691.7	125799.0	503.75	ug/L	503.75	ppb	14:35:40
2	As 188.979†	1197.4	1264.7	496.88	ug/L	496.88	ppb	14:36:00
2	B 249.677†	22864.5	23725.4	501.79	ug/L	501.79	ppb	14:35:40
2	Ba 233.527†	64619.4	66414.5	500.14	ug/L	500.14	ppb	14:35:40
2	Be 313.107†	1439385.4	1484382.7	500.77	ug/L	500.77	ppb	14:35:35
2	Cd 226.502†	45965.7	47444.1	500.12	ug/L	500.12	ppb	14:35:40
2	Co 228.616†	23765.5	24502.1	501.68	ug/L	501.68	ppb	14:35:40
2	Cr 267.716†	47097.0	48309.2	498.96	ug/L	498.96	ppb	14:35:40
2	Cu 324.752†	188194.1	184513.6	498.43	ug/L	498.43	ppb	14:35:40
2	Mn 257.610†	456841.1	468859.3	503.64	ug/L	503.64	ppb	14:35:35
2	Mo 202.031†	7430.2	7614.6	497.28	ug/L	497.28	ppb	14:36:00
2	Ni 231.604†	20424.4	20898.8	499.45	ug/L	499.45	ppb	14:35:40

2	P 214.914†	4776.7	4661.1	2392.9 ug/L	2392.9 ppb	14:36:00
2	Pb 220.353†	3987.9	4145.1	498.32 ug/L	498.32 ppb	14:36:00
2	S 181.975 Axial†	795.2	764.0	987.03 ug/L	987.03 ppb	14:36:00
2	Sb 206.836†	1536.6	1542.4	510.26 ug/L	510.26 ppb	14:36:00
2	Se 196.026†	855.7	891.5	515.41 ug/L	515.41 ppb	14:36:00
2	Si 251.611†	86400.5	88283.7	2489.2 ug/L	2489.2 ppb	14:35:40
2	Sn 189.927†	2769.5	2839.4	493.63 ug/L	493.63 ppb	14:36:00
2	Ti 334.940†	341357.8	351749.1	501.87 ug/L	501.87 ppb	14:35:35
2	Tl 190.801†	1527.7	1619.0	500.82 ug/L	500.82 ppb	14:36:00
2	U 409.014†	19207.4	21284.1	504.06 ug/L	504.06 ppb	14:35:40
2	V 292.402†	80353.6	83969.8	504.91 ug/L	504.91 ppb	14:35:40
2	Zn 213.857†	55868.2	56392.8	497.51 ug/L	497.51 ppb	14:35:40
2	SiO2†	86561.2	88443.6	5352.0 ug/L	5352.0 ppb	14:36:42
3	Sc Radial	5107.4	5107.4	94.4 %		14:34:36
3	Y RADIAL	5469.2	5469.2	93.61 %		14:34:36
3	Al 396.153Radial†	6533.8	6915.2	4979.4 ug/L	4979.4 ppb	14:34:36
3	Ca 317.933Radial†	3093.6	3258.0	5153.1 ug/L	5153.1 ppb	14:34:56
3	Fe 238.204 Radial†	570.2	594.1	5277.0 ug/L	5277.0 ppb	14:34:56
3	K 766.490 Radial†	31841.3	31340.9	5325.8 ug/L	5325.8 ppb	14:34:36
3	Mg 279.077 IEC†	148.8	156.3	5248.4 ug/L	5248.4 ppb	14:34:56
3	Na 589.592 Radial†	35001.3	37950.9	11069 ug/L	11069 ppb	14:34:36
3	Sr 421.552†	78664.0	83274.8	509.56 ug/L	509.56 ppb	14:34:36
3	Sc 361.383	926910.1	926910.1	96.306 %		14:36:06
3	Y 371.029	811793.3	811793.3	95.109 %		14:36:06
3	Ag 328.068†	121526.5	125886.0	504.06 ug/L	504.06 ppb	14:36:11
3	As 188.979†	1203.4	1283.6	504.19 ug/L	504.19 ppb	14:36:31
3	B 249.677†	22553.4	23644.1	500.08 ug/L	500.08 ppb	14:36:11
3	Ba 233.527†	64001.9	66456.4	500.45 ug/L	500.45 ppb	14:36:11
3	Be 313.107†	1423805.2	1483419.7	500.45 ug/L	500.45 ppb	14:36:06
3	Cd 226.502†	45623.9	47575.1	501.52 ug/L	501.52 ppb	14:36:11
3	Co 228.616†	23548.0	24527.4	502.22 ug/L	502.22 ppb	14:36:11
3	Cr 267.716†	46787.1	48485.2	500.77 ug/L	500.77 ppb	14:36:11
3	Cu 324.752†	185886.1	184106.3	497.32 ug/L	497.32 ppb	14:36:11
3	Mn 257.610†	451891.3	468548.7	503.30 ug/L	503.30 ppb	14:36:06
3	Mo 202.031†	7436.1	7699.2	502.79 ug/L	502.79 ppb	14:36:31
3	Ni 231.604†	20311.7	20997.7	501.81 ug/L	501.81 ppb	14:36:11
3	P 214.914†	4771.6	4706.2	2417.3 ug/L	2417.3 ppb	14:36:31
3	Pb 220.353†	3991.0	4190.5	503.76 ug/L	503.76 ppb	14:36:31
3	S 181.975 Axial†	790.2	767.2	991.17 ug/L	991.17 ppb	14:36:31
3	Sb 206.836†	1537.9	1559.9	516.07 ug/L	516.07 ppb	14:36:31
3	Se 196.026†	857.5	902.4	521.10 ug/L	521.10 ppb	14:36:31
3	Si 251.611†	85525.3	88288.3	2489.3 ug/L	2489.3 ppb	14:36:11
3	Sn 189.927†	2767.0	2866.2	498.25 ug/L	498.25 ppb	14:36:31
3	Ti 334.940†	337561.3	351415.3	501.39 ug/L	501.39 ppb	14:36:06
3	Tl 190.801†	1522.4	1629.7	504.11 ug/L	504.11 ppb	14:36:31
3	U 409.014†	18999.9	21271.7	503.77 ug/L	503.77 ppb	14:36:11
3	V 292.402†	79640.9	84079.2	505.65 ug/L	505.65 ppb	14:36:11
3	Zn 213.857†	55301.3	56394.8	497.53 ug/L	497.53 ppb	14:36:11
3	SiO2†	86113.3	88893.4	5379.2 ug/L	5379.2 ppb	14:36:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	935360.6	97.184	%	0.8275				0.85%
Sc Radial	5083.0	94.0	%	0.39				0.42%
Y 371.029	819808.3	96.048	%	0.9012				0.94%
Y RADIAL	5465.2	93.54	%	0.078				0.08%
Ag 328.068†	125232.3	501.48	ug/L	4.215	501.48	ppb	4.215	0.84%
QC value within limits for Ag 328.068 Recovery = 100.30%								
Al 396.153Radial†	6945.3	5001.4	ug/L	55.43	5001.4	ppb	55.43	1.11%
QC value within limits for Al 396.153Radial Recovery = 100.03%								
As 188.979†	1273.9	500.45	ug/L	3.657	500.45	ppb	3.657	0.73%
QC value within limits for As 188.979 Recovery = 100.09%								
B 249.677†	23573.5	498.58	ug/L	4.173	498.58	ppb	4.173	0.84%
QC value within limits for B 249.677 Recovery = 99.72%								
Ba 233.527†	66140.1	498.07	ug/L	3.855	498.07	ppb	3.855	0.77%
QC value within limits for Ba 233.527 Recovery = 99.61%								
Be 313.107†	1476525.7	498.12	ug/L	4.313	498.12	ppb	4.313	0.87%
QC value within limits for Be 313.107 Recovery = 99.62%								
Ca 317.933Radial†	3291.2	5205.5	ug/L	54.82	5205.5	ppb	54.82	1.05%

```
   QC value within limits for Ca 317.933Radial  Recovery = 104.11%
Cd 226.502†            47279.7      498.39 ug/L         4.261      498.39 ppb          4.261   0.85%
   QC value within limits for Cd 226.502  Recovery = 99.68%
Co 228.616†            24406.8      499.74 ug/L         3.836      499.74 ppb          3.836   0.77%
   QC value within limits for Co 228.616  Recovery = 99.95%
Cr 267.716†            48142.5      497.24 ug/L         4.645      497.24 ppb          4.645   0.93%
   QC value within limits for Cr 267.716  Recovery = 99.45%
Cu 324.752†           183451.9      495.56 ug/L         4.050      495.56 ppb          4.050   0.82%
   QC value within limits for Cu 324.752  Recovery = 99.11%
Fe 238.204 Radial†       602.5      5351.7 ug/L         65.74      5351.7 ppb          65.74   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 107.03%
K 766.490 Radial†      31488.6      5350.9 ug/L         51.47      5350.9 ppb          51.47   0.96%
   QC value within limits for K 766.490 Radial  Recovery = 107.02%
Mg 279.077 IEC†          157.2      5281.2 ug/L         33.53      5281.2 ppb          33.53   0.63%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.62%
Mn 257.610†           466058.0      500.63 ug/L         4.921      500.63 ppb          4.921   0.98%
   QC value within limits for Mn 257.610  Recovery = 100.13%
Mo 202.031†             7623.2      497.84 ug/L         4.703      497.84 ppb          4.703   0.94%
   QC value within limits for Mo 202.031  Recovery = 99.57%
Na 589.592 Radial†     38257.1       11158 ug/L         137.9       11158 ppb          137.9   1.24%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = 111.58%
Ni 231.604†            20848.3      498.24 ug/L         4.304      498.24 ppb          4.304   0.86%
   QC value within limits for Ni 231.604  Recovery = 99.65%
P 214.914†              4660.7      2393.3 ug/L         23.87      2393.3 ppb          23.87   1.00%
   QC value within limits for P 214.914  Recovery = 95.73%
Pb 220.353†             4152.9      499.24 ug/L         4.132      499.24 ppb          4.132   0.83%
   QC value within limits for Pb 220.353  Recovery = 99.85%
S 181.975 Axial†         762.3      984.85 ug/L         7.641      984.85 ppb          7.641   0.78%
   QC value within limits for S 181.975 Axial  Recovery = 98.49%
Sb 206.836†             1545.8      511.38 ug/L         4.244      511.38 ppb          4.244   0.83%
   QC value within limits for Sb 206.836  Recovery = 102.28%
Se 196.026†              896.8      518.19 ug/L         2.849      518.19 ppb          2.849   0.55%
   QC value within limits for Se 196.026  Recovery = 103.64%
Si 251.611†            87891.1      2478.1 ug/L         19.29      2478.1 ppb          19.29   0.78%
   QC value within limits for Si 251.611  Recovery = 99.13%
Sn 189.927†             2838.1      493.38 ug/L         5.000      493.38 ppb          5.000   1.01%
   QC value within limits for Sn 189.927  Recovery = 98.68%
Sr 421.552†            83655.2      511.89 ug/L         6.006      511.89 ppb          6.006   1.17%
   QC value within limits for Sr 421.552  Recovery = 102.38%
Ti 334.940†           349810.1      499.10 ug/L         4.385      499.10 ppb          4.385   0.88%
   QC value within limits for Ti 334.940  Recovery = 99.82%
Tl 190.801†             1622.9      502.00 ug/L         1.832      502.00 ppb          1.832   0.36%
   QC value within limits for Tl 190.801  Recovery = 100.40%
U 409.014†             21234.9      502.89 ug/L         1.768      502.89 ppb          1.768   0.35%
   QC value within limits for U 409.014  Recovery = 100.58%
V 292.402†             83623.2      502.87 ug/L         4.195      502.87 ppb          4.195   0.83%
   QC value within limits for V 292.402  Recovery = 100.57%
Zn 213.857†            56097.8      494.90 ug/L         4.533      494.90 ppb          4.533   0.92%
   QC value within limits for Zn 213.857  Recovery = 98.98%
SiO2†                  87952.0      5322.2 ug/L         76.40      5322.2 ppb          76.40   1.44%
   QC value within limits for SiO2  Recovery = 99.53%
QC Failed.  Continue with analysis.
```

Sequence No.: 8
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/29/2010 14:38:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5271.6	5271.6	97.5	%			14:40:49
1	Y RADIAL	5637.8	5637.8	96.49	%			14:40:49
1	Al 396.153Radial†	4.7	1.7	1.2189	ug/L	1.2189	ppb	14:41:09
1	Ca 317.933Radial†	28.5	11.7	18.533	ug/L	18.533	ppb	14:41:09
1	Fe 238.204 Radial†	10.0	0.7	5.8835	ug/L	5.8835	ppb	14:41:09
1	K 766.490 Radial†	2672.3	367.7	62.433	ug/L	62.433	ppb	14:40:49
1	Mg 279.077 IEC†	4.0	2.7	92.284	ug/L	92.284	ppb	14:41:09
1	Na 589.592 Radial†	155.6	1049.9	306.23	ug/L	306.23	ppb	14:40:49
1	Sr 421.552†	22.7	5.9	0.0360	ug/L	0.0360	ppb	14:40:49
1	Sc 361.383	931217.9	931217.9	96.754	%			14:42:06
1	Y 371.029	821395.6	821395.6	96.234	%			14:42:06
1	Ag 328.068†	357.1	67.8	0.2629	ug/L	0.2629	ppb	14:42:06
1	As 188.979†	-35.8	-3.0	-1.1638	ug/L	-1.1638	ppb	14:42:26
1	B 249.677†	146.7	377.3	8.0147	ug/L	8.0147	ppb	14:42:26
1	Ba 233.527†	13.8	14.1	0.1062	ug/L	0.1062	ppb	14:42:26
1	Be 313.107†	-4948.7	-106.7	-0.0358	ug/L	-0.0358	ppb	14:42:06
1	Cd 226.502†	-184.8	10.4	0.1115	ug/L	0.1115	ppb	14:42:26
1	Co 228.616†	-68.7	5.3	0.1096	ug/L	0.1096	ppb	14:42:26
1	Cr 267.716†	92.1	-1.1	-0.0150	ug/L	-0.0150	ppb	14:42:26
1	Cu 324.752†	8928.8	319.4	0.8573	ug/L	0.8573	ppb	14:42:06
1	Mn 257.610†	729.5	80.2	0.0829	ug/L	0.0829	ppb	14:42:26
1	Mo 202.031†	33.3	12.3	0.8050	ug/L	0.8050	ppb	14:42:26
1	Ni 231.604†	83.5	-6.7	-0.1614	ug/L	-0.1614	ppb	14:42:26
1	P 214.914†	250.5	10.5	5.4363	ug/L	5.4363	ppb	14:42:26
1	Pb 220.353†	-60.4	-16.0	-1.9181	ug/L	-1.9181	ppb	14:42:26
1	S 181.975 Axial†	47.7	-4.0	-5.1129	ug/L	-5.1129	ppb	14:42:26
1	Sb 206.836†	41.2	5.7	1.8199	ug/L	1.8199	ppb	14:42:26
1	Se 196.026†	-18.7	-7.3	-4.0352	ug/L	-4.0352	ppb	14:42:26
1	Si 251.611†	574.9	77.0	2.1652	ug/L	2.1652	ppb	14:42:26
1	Sn 189.927†	6.2	-0.5	-0.0865	ug/L	-0.0865	ppb	14:42:26
1	Ti 334.940†	-848.4	30.9	0.0343	ug/L	0.0343	ppb	14:42:06
1	Tl 190.801†	-44.6	2.8	0.8629	ug/L	0.8629	ppb	14:42:26
1	U 409.014†	-1063.1	444.3	10.557	ug/L	10.557	ppb	14:42:06
1	V 292.402†	-1326.4	13.0	0.1094	ug/L	0.1094	ppb	14:42:06
1	Zn 213.857†	1067.2	75.5	0.6710	ug/L	0.6710	ppb	14:42:26
1	SiO2†	572.2	68.9	4.1557	ug/L	4.1557	ppb	14:43:22
2	Sc Radial	5270.2	5270.2	97.5	%			14:41:14
2	Y RADIAL	5693.6	5693.6	97.45	%			14:41:14
2	Al 396.153Radial†	15.5	12.9	9.3064	ug/L	9.3064	ppb	14:41:34
2	Ca 317.933Radial†	26.9	10.1	15.928	ug/L	15.928	ppb	14:41:34
2	Fe 238.204 Radial†	10.2	0.8	7.5122	ug/L	7.5122	ppb	14:41:34
2	K 766.490 Radial†	2791.4	490.6	83.348	ug/L	83.348	ppb	14:41:14
2	Mg 279.077 IEC†	1.5	0.3	8.6367	ug/L	8.6367	ppb	14:41:34
2	Na 589.592 Radial†	152.6	1046.9	305.35	ug/L	305.35	ppb	14:41:14
2	Sr 421.552†	44.4	28.2	0.1723	ug/L	0.1723	ppb	14:41:14
2	Sc 361.383	925891.7	925891.7	96.201	%			14:42:31
2	Y 371.029	816318.5	816318.5	95.639	%			14:42:31
2	Ag 328.068†	330.8	42.5	0.1615	ug/L	0.1615	ppb	14:42:31
2	As 188.979†	-38.2	-5.6	-2.1817	ug/L	-2.1817	ppb	14:42:51
2	B 249.677†	144.4	375.8	7.9825	ug/L	7.9825	ppb	14:42:51
2	Ba 233.527†	14.2	14.6	0.1094	ug/L	0.1094	ppb	14:42:51
2	Be 313.107†	-4908.0	-93.9	-0.0314	ug/L	-0.0314	ppb	14:42:31
2	Cd 226.502†	-178.1	16.2	0.1725	ug/L	0.1725	ppb	14:42:51
2	Co 228.616†	-73.2	0.2	0.0049	ug/L	0.0049	ppb	14:42:51
2	Cr 267.716†	105.6	13.4	0.1341	ug/L	0.1341	ppb	14:42:51
2	Cu 324.752†	8887.0	329.1	0.8834	ug/L	0.8834	ppb	14:42:31
2	Mn 257.610†	713.3	67.7	0.0730	ug/L	0.0730	ppb	14:42:51
2	Mo 202.031†	26.1	5.1	0.3340	ug/L	0.3340	ppb	14:42:51
2	Ni 231.604†	82.0	-7.8	-0.1863	ug/L	-0.1863	ppb	14:42:51

2	P 214.914†	248.8	10.3	5.3280	ug/L	5.3280 ppb	14:42:51
2	Pb 220.353†	-52.9	-8.5	-1.0192	ug/L	-1.0192 ppb	14:42:51
2	S 181.975 Axial†	40.4	-11.3	-14.648	ug/L	-14.648 ppb	14:42:51
2	Sb 206.836†	45.1	10.0	3.1964	ug/L	3.1964 ppb	14:42:51
2	Se 196.026†	-18.5	-7.2	-3.9780	ug/L	-3.9780 ppb	14:42:51
2	Si 251.611†	574.0	79.5	2.2427	ug/L	2.2427 ppb	14:42:51
2	Sn 189.927†	11.4	4.9	0.8567	ug/L	0.8567 ppb	14:42:51
2	Ti 334.940†	-824.9	50.2	0.0683	ug/L	0.0683 ppb	14:42:31
2	Tl 190.801†	-40.0	7.3	2.2339	ug/L	2.2339 ppb	14:42:51
2	U 409.014†	-1047.1	454.6	10.803	ug/L	10.803 ppb	14:42:31
2	V 292.402†	-1367.4	-37.5	-0.1980	ug/L	-0.1980 ppb	14:42:31
2	Zn 213.857†	1060.9	75.3	0.6698	ug/L	0.6698 ppb	14:42:51
2	SiO2†	574.4	74.5	4.5108	ug/L	4.5108 ppb	14:43:27
3	Sc Radial	5196.3	5196.3	96.1	%		14:41:39
3	Y RADIAL	5640.2	5640.2	96.53	%		14:41:39
3	Al 396.153Radial†	23.5	21.4	15.455	ug/L	15.455 ppb	14:41:59
3	Ca 317.933Radial†	27.7	11.3	17.909	ug/L	17.909 ppb	14:41:59
3	Fe 238.204 Radial†	10.5	1.3	11.707	ug/L	11.707 ppb	14:41:59
3	K 766.490 Radial†	2712.5	449.2	76.307	ug/L	76.307 ppb	14:41:39
3	Mg 279.077 IEC†	2.5	1.3	41.995	ug/L	41.995 ppb	14:41:59
3	Na 589.592 Radial†	73.2	966.5	281.89	ug/L	281.89 ppb	14:41:39
3	Sr 421.552†	39.3	23.5	0.1437	ug/L	0.1437 ppb	14:41:39
3	Sc 361.383	919231.2	919231.2	95.509	%		14:42:57
3	Y 371.029	810783.4	810783.4	94.990	%		14:42:57
3	Ag 328.068†	356.8	72.2	0.2824	ug/L	0.2824 ppb	14:42:57
3	As 188.979†	-32.7	-0.1	-0.0545	ug/L	-0.0545 ppb	14:43:17
3	B 249.677†	123.4	354.9	7.5379	ug/L	7.5379 ppb	14:43:17
3	Ba 233.527†	8.0	8.2	0.0608	ug/L	0.0608 ppb	14:43:17
3	Be 313.107†	-4875.7	-97.0	-0.0327	ug/L	-0.0327 ppb	14:42:57
3	Cd 226.502†	-181.4	11.5	0.1217	ug/L	0.1217 ppb	14:43:17
3	Co 228.616†	-68.8	4.2	0.0880	ug/L	0.0880 ppb	14:43:17
3	Cr 267.716†	94.2	2.3	0.0204	ug/L	0.0204 ppb	14:43:17
3	Cu 324.752†	8895.7	405.1	1.0906	ug/L	1.0906 ppb	14:42:57
3	Mn 257.610†	703.5	62.8	0.0668	ug/L	0.0668 ppb	14:43:17
3	Mo 202.031†	28.4	7.7	0.5046	ug/L	0.5046 ppb	14:43:17
3	Ni 231.604†	92.8	4.2	0.0992	ug/L	0.0992 ppb	14:43:17
3	P 214.914†	250.0	13.4	6.9537	ug/L	6.9537 ppb	14:43:17
3	Pb 220.353†	-38.6	6.0	0.7252	ug/L	0.7252 ppb	14:43:17
3	S 181.975 Axial†	42.0	-9.3	-12.069	ug/L	-12.069 ppb	14:43:17
3	Sb 206.836†	40.9	5.9	1.9041	ug/L	1.9041 ppb	14:43:17
3	Se 196.026†	-18.5	-7.3	-4.0214	ug/L	-4.0214 ppb	14:43:17
3	Si 251.611†	573.5	83.2	2.3465	ug/L	2.3465 ppb	14:43:17
3	Sn 189.927†	10.9	4.4	0.7740	ug/L	0.7740 ppb	14:43:17
3	Ti 334.940†	-876.1	-9.6	-0.0182	ug/L	-0.0182 ppb	14:42:57
3	Tl 190.801†	-51.3	-4.8	-1.4883	ug/L	-1.4883 ppb	14:43:17
3	U 409.014†	-1165.3	322.9	7.6727	ug/L	7.6727 ppb	14:42:57
3	V 292.402†	-1409.5	-91.9	-0.5246	ug/L	-0.5246 ppb	14:42:57
3	Zn 213.857†	1044.5	66.2	0.5857	ug/L	0.5857 ppb	14:43:17
3	SiO2†	586.3	91.3	5.5277	ug/L	5.5277 ppb	14:43:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	925446.9	96.154	%	0.6240				0.65%
Sc Radial	5246.1	97.0	%	0.80				0.82%
Y 371.029	816165.9	95.621	%	0.6218				0.65%
Y RADIAL	5657.2	96.82	%	0.540				0.56%
Ag 328.068†	60.8	0.2356	ug/L	0.06491	0.2356	ppb	0.06491	27.55%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.0	8.6600	ug/L	7.13995	8.6600	ppb	7.13995	82.45%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.9	-1.1333	ug/L	1.06391	-1.1333	ppb	1.06391	93.88%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	369.3	7.8450	ug/L	0.26649	7.8450	ppb	0.26649	3.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.3	0.0922	ug/L	0.02717	0.0922	ppb	0.02717	29.48%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-99.2	-0.0333	ug/L	0.00227	-0.0333	ppb	0.00227	6.80%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.0	17.457	ug/L	1.3606	17.457	ppb	1.3606	7.79%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              12.7      0.1352 ug/L       0.03269      0.1352 ppb        0.03269  24.17%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               3.2      0.0675 ug/L       0.05528      0.0675 ppb        0.05528  81.87%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               4.9      0.0465 ug/L       0.07787      0.0465 ppb        0.07787 167.49%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             351.2      0.9437 ug/L       0.12782      0.9437 ppb        0.12782  13.54%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.9      8.3675 ug/L       3.00436      8.3675 ppb        3.00436  35.90%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       435.8      74.029 ug/L       10.6420      74.029 ppb        10.6420  14.38%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.4      47.639 ug/L       42.1085      47.639 ppb        42.1085  88.39%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              70.2      0.0742 ug/L       0.00809      0.0742 ppb        0.00809  10.90%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               8.4      0.5479 ug/L       0.23843      0.5479 ppb        0.23843  43.52%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      1021.1      297.83 ug/L        13.805      297.83 ppb         13.805   4.64%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -3.5     -0.0828 ug/L       0.15815     -0.0828 ppb        0.15815 190.94%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               11.4      5.9060 ug/L       0.90894      5.9060 ppb        0.90894  15.39%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -6.2     -0.7373 ug/L       1.34398     -0.7373 ppb        1.34398 182.28%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -8.2     -10.610 ug/L        4.9322     -10.610 ppb         4.9322  46.49%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.2      2.3068 ug/L       0.77160      2.3068 ppb        0.77160  33.45%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -7.3     -4.0115 ug/L       0.02982     -4.0115 ppb        0.02982   0.74%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              79.9      2.2515 ug/L       0.09098      2.2515 ppb        0.09098   4.04%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.9      0.5147 ug/L       0.52233      0.5147 ppb        0.52233 101.48%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              19.2      0.1173 ug/L       0.07185      0.1173 ppb        0.07185  61.24%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              23.8      0.0282 ug/L       0.04356      0.0282 ppb        0.04356 154.66%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.7      0.5362 ug/L       1.88245      0.5362 ppb        1.88245 351.09%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              407.3      9.6775 ug/L       1.74052      9.6775 ppb        1.74052  17.99%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -38.8     -0.2044 ug/L       0.31700     -0.2044 ppb        0.31700 155.08%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              72.3      0.6422 ug/L       0.04892      0.6422 ppb        0.04892   7.62%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    78.2      4.7314 ug/L       0.71212      4.7314 ppb        0.71212  15.05%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

1/29/2010 17:26:04 Hg ReAlign... Actual peak offset (nm): -0.008
Drift (nm): -0.000 Slit adjustment: -2

Analysis Begun

Start Time: 1/29/2010 17:29:25 **Plasma On Time: 1/29/2010 16:57:59**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\012910.sif
Batch ID:
Results Data Set: 012910
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 1/25/2010 09:50:48**
IEC File: 011110.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 1/29/2010 17:29:34**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Rep1#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc Radial	4797.8	4797.8	0.000	%	17:31:26
1	Y RADIAL	5009.1	5009.1	0.000	%	17:31:26
1	Al 396.153Radial†	-110.1	-121.0	[0.00]	ug/L	17:31:46
1	Ca 317.933Radial†	19.7	21.6	[0.00]	ug/L	17:31:46
1	Fe 238.204 Radial†	10.3	11.4	[0.00]	ug/L	17:31:46
1	K 766.490 Radial†	2635.7	2897.6	[0.00]	ug/L	17:31:26
1	Mg 279.077 IEC†	0.0	0.0	[0.00]	ug/L	17:31:46
1	Na 589.592 Radial†	-601.9	-661.7	[0.00]	ug/L	17:31:26
1	Sr 421.552†	49.7	54.7	[0.00]	ug/L	17:31:26
1	Sc 361.383	988397.0	988397.0	0.0000	%	17:32:43
1	Y 371.029	857253.5	857253.5	0.0000	%	17:32:43
1	Ag 328.068†	376.7	378.0	[0.00]	ug/L	17:32:48
1	As 188.979†	-37.8	-38.0	[0.00]	ug/L	17:33:08
1	B 249.677†	-350.2	-351.4	[0.00]	ug/L	17:33:08
1	Ba 233.527†	-15.6	-15.6	[0.00]	ug/L	17:33:08
1	Be 313.107†	-4816.4	-4833.9	[0.00]	ug/L	17:32:48
1	Cd 226.502†	-185.2	-185.8	[0.00]	ug/L	17:33:08
1	Co 228.616†	-70.3	-70.5	[0.00]	ug/L	17:33:08
1	Cr 267.716†	61.6	61.8	[0.00]	ug/L	17:33:08
1	Cu 324.752†	8942.2	8974.6	[0.00]	ug/L	17:32:48
1	Mn 257.610†	577.8	579.9	[0.00]	ug/L	17:33:08
1	Mo 202.031†	13.2	13.2	[0.00]	ug/L	17:33:08
1	Ni 231.604†	83.2	83.5	[0.00]	ug/L	17:33:08
1	P 214.914†	255.6	256.5	[0.00]	ug/L	17:33:08
1	Pb 220.353†	-54.7	-54.9	[0.00]	ug/L	17:33:08
1	S 181.975 Axial†	45.0	45.2	[0.00]	ug/L	17:33:08
1	Sb 206.836†	38.8	38.9	[0.00]	ug/L	17:33:08
1	Se 196.026†	-19.5	-19.5	[0.00]	ug/L	17:33:08
1	Si 251.611†	409.3	410.8	[0.00]	ug/L	17:33:08
1	Sn 189.927†	-2.0	-2.0	[0.00]	ug/L	17:33:08
1	Ti 334.940†	-1028.9	-1032.6	[0.00]	ug/L	17:32:48
1	Tl 190.801†	-49.4	-49.6	[0.00]	ug/L	17:33:08
1	U 409.014†	-2912.5	-2923.1	[0.00]	ug/L	17:32:43
1	V 292.402†	-1468.5	-1473.8	[0.00]	ug/L	17:32:48
1	Zn 213.857†	906.8	910.1	[0.00]	ug/L	17:33:08
1	SiO2†	391.0	392.4	[0.00]	ug/L	17:34:14
2	Sc Radial	5436.2	5436.2	0.000	%	17:31:51
2	Y RADIAL	5689.9	5689.9	0.000	%	17:31:51
2	Al 396.153Radial†	-100.0	-97.0	[0.00]	ug/L	17:32:11
2	Ca 317.933Radial†	23.2	22.5	[0.00]	ug/L	17:32:11
2	Fe 238.204 Radial†	9.7	9.4	[0.00]	ug/L	17:32:11
2	K 766.490 Radial†	2629.5	2551.4	[0.00]	ug/L	17:31:51
2	Mg 279.077 IEC†	2.5	2.4	[0.00]	ug/L	17:32:11
2	Na 589.592 Radial†	-617.4	-599.1	[0.00]	ug/L	17:31:51
2	Sr 421.552†	60.9	59.1	[0.00]	ug/L	17:31:51
2	Sc 361.383	998367.0	998367.0	0.0000	%	17:33:13
2	Y 371.029	865280.2	865280.2	0.0000	%	17:33:13
2	Ag 328.068†	312.6	310.6	[0.00]	ug/L	17:33:18
2	As 188.979†	-42.3	-42.1	[0.00]	ug/L	17:33:38
2	B 249.677†	-325.4	-323.3	[0.00]	ug/L	17:33:38
2	Ba 233.527†	-20.6	-20.4	[0.00]	ug/L	17:33:38
2	Be 313.107†	-4779.7	-4749.2	[0.00]	ug/L	17:33:18
2	Cd 226.502†	-180.7	-179.5	[0.00]	ug/L	17:33:38
2	Co 228.616†	-63.6	-63.2	[0.00]	ug/L	17:33:38
2	Cr 267.716†	71.7	71.3	[0.00]	ug/L	17:33:38
2	Cu 324.752†	8944.8	8887.6	[0.00]	ug/L	17:33:18
2	Mn 257.610†	578.3	574.7	[0.00]	ug/L	17:33:38
2	Mo 202.031†	10.0	9.9	[0.00]	ug/L	17:33:38
2	Ni 231.604†	79.4	78.9	[0.00]	ug/L	17:33:38
2	P 214.914†	244.7	243.1	[0.00]	ug/L	17:33:38
2	Pb 220.353†	-36.0	-35.7	[0.00]	ug/L	17:33:38
2	S 181.975 Axial†	35.7	35.5	[0.00]	ug/L	17:33:38
2	Sb 206.836†	36.9	36.6	[0.00]	ug/L	17:33:38
2	Se 196.026†	-26.0	-25.8	[0.00]	ug/L	17:33:38
2	Si 251.611†	408.0	405.3	[0.00]	ug/L	17:33:38
2	Sn 189.927†	-0.7	-0.7	[0.00]	ug/L	17:33:38
2	Ti 334.940†	-1060.1	-1053.3	[0.00]	ug/L	17:33:18
2	Tl 190.801†	-44.3	-44.0	[0.00]	ug/L	17:33:38
2	U 409.014†	-2727.8	-2710.3	[0.00]	ug/L	17:33:13
2	V 292.402†	-1486.9	-1477.4	[0.00]	ug/L	17:33:18

2	Zn 213.857†	923.9	918.0	[0.00]	ug/L	17:33:38
2	SiO2†	416.2	413.5	[0.00]	ug/L	17:34:19
3	Sc Radial	5590.0	5590.0	0.000	%	17:32:16
3	Y RADIAL	5870.2	5870.2	0.000	%	17:32:16
3	Al 396.153Radial†	-108.8	-102.7	[0.00]	ug/L	17:32:36
3	Ca 317.933Radial†	19.0	18.0	[0.00]	ug/L	17:32:36
3	Fe 238.204 Radial†	10.0	9.4	[0.00]	ug/L	17:32:36
3	K 766.490 Radial†	2686.0	2534.5	[0.00]	ug/L	17:32:16
3	Mg 279.077 IEC†	1.8	1.7	[0.00]	ug/L	17:32:36
3	Na 589.592 Radial†	-532.2	-502.1	[0.00]	ug/L	17:32:16
3	Sr 421.552†	91.6	86.4	[0.00]	ug/L	17:32:16
3	Sc 361.383	989193.0	989193.0	0.0000	%	17:33:44
3	Y 371.029	857344.4	857344.4	0.0000	%	17:33:44
3	Ag 328.068†	433.8	435.0	[0.00]	ug/L	17:33:49
3	As 188.979†	-29.4	-29.5	[0.00]	ug/L	17:34:09
3	B 249.677†	-347.5	-348.5	[0.00]	ug/L	17:34:09
3	Ba 233.527†	-13.1	-13.1	[0.00]	ug/L	17:34:09
3	Be 313.107†	-4810.7	-4824.3	[0.00]	ug/L	17:33:49
3	Cd 226.502†	-184.8	-185.3	[0.00]	ug/L	17:34:09
3	Co 228.616†	-73.2	-73.5	[0.00]	ug/L	17:34:09
3	Cr 267.716†	74.5	74.7	[0.00]	ug/L	17:34:09
3	Cu 324.752†	9022.6	9048.0	[0.00]	ug/L	17:33:49
3	Mn 257.610†	554.3	555.9	[0.00]	ug/L	17:34:09
3	Mo 202.031†	8.5	8.6	[0.00]	ug/L	17:34:09
3	Ni 231.604†	78.8	79.0	[0.00]	ug/L	17:34:09
3	P 214.914†	245.7	246.4	[0.00]	ug/L	17:34:09
3	Pb 220.353†	-44.7	-44.8	[0.00]	ug/L	17:34:09
3	S 181.975 Axial†	47.4	47.6	[0.00]	ug/L	17:34:09
3	Sb 206.836†	28.9	29.0	[0.00]	ug/L	17:34:09
3	Se 196.026†	-25.7	-25.8	[0.00]	ug/L	17:34:09
3	Si 251.611†	393.7	394.8	[0.00]	ug/L	17:34:09
3	Sn 189.927†	6.0	6.0	[0.00]	ug/L	17:34:09
3	Ti 334.940†	-955.4	-958.1	[0.00]	ug/L	17:33:49
3	Tl 190.801†	-41.4	-41.5	[0.00]	ug/L	17:34:09
3	U 409.014†	-2740.3	-2748.0	[0.00]	ug/L	17:33:44
3	V 292.402†	-1443.4	-1447.5	[0.00]	ug/L	17:33:49
3	Zn 213.857†	931.7	934.3	[0.00]	ug/L	17:34:09
3	SiO2†	386.1	387.2	[0.00]	ug/L	17:34:24

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	991985.7	5540.72	0.56%	0.0000	%
Sc Radial	5274.6	420.05	7.96%	0.000	%
Y 371.029	859959.3	4608.18	0.54%	0.0000	%
Y RADIAL	5523.1	454.14	8.22%	0.000	%
Ag 328.068†	374.5	62.29	16.63%	[0.00]	ug/L
Al 396.153Radial†	-106.9	12.53	11.72%	[0.00]	ug/L
As 188.979†	-36.5	6.38	17.49%	[0.00]	ug/L
B 249.677†	-341.1	15.44	4.53%	[0.00]	ug/L
Ba 233.527†	-16.4	3.73	22.75%	[0.00]	ug/L
Be 313.107†	-4802.5	46.41	0.97%	[0.00]	ug/L
Ca 317.933Radial†	20.7	2.42	11.69%	[0.00]	ug/L
Cd 226.502†	-183.6	3.49	1.90%	[0.00]	ug/L
Co 228.616†	-69.1	5.30	7.67%	[0.00]	ug/L
Cr 267.716†	69.3	6.67	9.63%	[0.00]	ug/L
Cu 324.752†	8970.1	80.31	0.90%	[0.00]	ug/L
Fe 238.204 Radial†	10.1	1.13	11.27%	[0.00]	ug/L
K 766.490 Radial†	2661.2	204.95	7.70%	[0.00]	ug/L
Mg 279.077 IEC†	1.4	1.22	89.94%	[0.00]	ug/L
Mn 257.610†	570.1	12.60	2.21%	[0.00]	ug/L
Mo 202.031†	10.6	2.41	22.77%	[0.00]	ug/L
Na 589.592 Radial†	-587.6	80.38	13.68%	[0.00]	ug/L
Ni 231.604†	80.5	2.61	3.24%	[0.00]	ug/L
P 214.914†	248.7	7.01	2.82%	[0.00]	ug/L
Pb 220.353†	-45.1	9.59	21.25%	[0.00]	ug/L
S 181.975 Axial†	42.7	6.40	14.98%	[0.00]	ug/L
Sb 206.836†	34.9	5.18	14.86%	[0.00]	ug/L
Se 196.026†	-23.7	3.62	15.28%	[0.00]	ug/L
Si 251.611†	403.6	8.10	2.01%	[0.00]	ug/L

Sn 189.927†	1.1	4.32	388.05%	[0.00] ug/L
Sr 421.552†	66.7	17.19	25.76%	[0.00] ug/L
Ti 334.940†	-1014.7	50.08	4.94%	[0.00] ug/L
Tl 190.801†	-45.0	4.14	9.19%	[0.00] ug/L
U 409.014†	-2793.8	113.52	4.06%	[0.00] ug/L
V 292.402†	-1466.2	16.33	1.11%	[0.00] ug/L
Zn 213.857†	920.8	12.33	1.34%	[0.00] ug/L
SiO2†	397.7	13.94	3.51%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 1/29/2010 17:36:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5389.7	5389.7	102	%	17:38:33
1	Y RADIAL	5656.4	5656.4	102.4	%	17:38:33
1	K 766.490 Radial†	8471.9	5630.0	[1000]	ug/L	17:38:28
1	Sr 421.552†	16867.5	16440.8	[100]	ug/L	17:38:33
1	Sc 361.383	999729.2	999729.2	100.78	%	17:38:59
1	Y 371.029	863821.8	863821.8	100.45	%	17:38:59
1	Ag 328.068†	23786.3	23227.5	[100]	ug/L	17:39:04
1	As 188.979†	208.2	243.1	[100]	ug/L	17:39:24
1	B 249.677†	3830.1	4141.5	[100]	ug/L	17:39:04
1	Ba 233.527†	12207.6	12129.4	[100]	ug/L	17:39:04
1	Be 313.107†	265242.0	267990.0	[100]	ug/L	17:38:59
1	Cd 226.502†	8716.8	8832.8	[100]	ug/L	17:39:04
1	Co 228.616†	4529.9	4563.9	[100]	ug/L	17:39:24
1	Cr 267.716†	9412.3	9270.1	[100]	ug/L	17:39:04
1	Cu 324.752†	43655.1	34346.9	[100]	ug/L	17:39:04
1	Mn 257.610†	89058.5	87798.5	[100]	ug/L	17:39:04
1	Mo 202.031†	1443.4	1421.6	[100]	ug/L	17:39:24
1	Ni 231.604†	4104.1	3991.9	[100]	ug/L	17:39:24
1	P 214.914†	1141.7	884.2	[500]	ug/L	17:39:24
1	Pb 220.353†	791.3	830.3	[100]	ug/L	17:39:24
1	S 181.975 Axial†	194.5	150.3	[200]	ug/L	17:39:24
1	Sb 206.836†	334.2	296.8	[100]	ug/L	17:39:24
1	Se 196.026†	159.0	181.5	[100]	ug/L	17:39:24
1	Si 251.611†	16395.0	15864.4	[500]	ug/L	17:39:04
1	Sn 189.927†	536.3	531.0	[100]	ug/L	17:39:24
1	Ti 334.940†	63398.7	63922.3	[100]	ug/L	17:39:04
1	Tl 190.801†	270.6	313.6	[100]	ug/L	17:39:24
1	U 409.014†	967.3	3753.6	[100]	ug/L	17:39:04
1	V 292.402†	13518.7	14880.2	[100]	ug/L	17:39:04
1	Zn 213.857†	11628.8	10617.9	[100]	ug/L	17:39:04
1	SiO2†	16422.4	15897.5	[1069.5]	ug/L	17:40:31
2	Sc Radial	5442.8	5442.8	103	%	17:38:43
2	Y RADIAL	5684.6	5684.6	102.9	%	17:38:43
2	K 766.490 Radial†	8423.2	5501.8	[1000]	ug/L	17:38:38
2	Sr 421.552†	16968.5	16377.5	[100]	ug/L	17:38:43
2	Sc 361.383	996410.6	996410.6	100.45	%	17:39:30
2	Y 371.029	861354.8	861354.8	100.16	%	17:39:30
2	Ag 328.068†	23577.9	23098.6	[100]	ug/L	17:39:35
2	As 188.979†	192.4	228.0	[100]	ug/L	17:39:55
2	B 249.677†	3785.2	4109.5	[100]	ug/L	17:39:35
2	Ba 233.527†	11972.7	11935.9	[100]	ug/L	17:39:35
2	Be 313.107†	265350.6	268974.7	[100]	ug/L	17:39:30
2	Cd 226.502†	8590.1	8735.5	[100]	ug/L	17:39:35
2	Co 228.616†	4468.3	4517.5	[100]	ug/L	17:39:55
2	Cr 267.716†	9301.0	9190.4	[100]	ug/L	17:39:35
2	Cu 324.752†	43072.9	33911.5	[100]	ug/L	17:39:35
2	Mn 257.610†	87986.0	87025.1	[100]	ug/L	17:39:35
2	Mo 202.031†	1424.9	1407.9	[100]	ug/L	17:39:55
2	Ni 231.604†	4058.0	3959.6	[100]	ug/L	17:39:55
2	P 214.914†	1126.2	872.5	[500]	ug/L	17:39:55
2	Pb 220.353†	771.2	812.9	[100]	ug/L	17:39:55
2	S 181.975 Axial†	185.7	142.1	[200]	ug/L	17:39:55
2	Sb 206.836†	323.9	287.6	[100]	ug/L	17:39:55
2	Se 196.026†	155.9	178.9	[100]	ug/L	17:39:55
2	Si 251.611†	16151.1	15675.8	[500]	ug/L	17:39:35
2	Sn 189.927†	532.1	528.7	[100]	ug/L	17:39:55
2	Ti 334.940†	62382.8	63120.4	[100]	ug/L	17:39:35
2	Tl 190.801†	257.0	300.8	[100]	ug/L	17:39:55
2	U 409.014†	815.6	3605.8	[100]	ug/L	17:39:35

2	V 292.402†	13337.2	14744.2	[100]	ug/L	17:39:35
2	Zn 213.857†	11515.4	10543.5	[100]	ug/L	17:39:35
2	SiO2†	16291.6	15821.5	[1069.5]	ug/L	17:40:36
3	Sc Radial	5597.6	5597.6	106	%	17:38:53
3	Y RADIAL	5852.0	5852.0	106.0	%	17:38:53
3	K 766.490 Radial†	8402.9	5257.0	[1000]	ug/L	17:38:48
3	Sr 421.552†	17106.7	16053.0	[100]	ug/L	17:38:53
3	Sc 361.383	1007882.3	1007882.3	101.60	%	17:40:00
3	Y 371.029	870985.5	870985.5	101.28	%	17:40:00
3	Ag 328.068†	23635.1	22887.8	[100]	ug/L	17:40:05
3	As 188.979†	207.1	240.3	[100]	ug/L	17:40:25
3	B 249.677†	3771.4	4053.0	[100]	ug/L	17:40:05
3	Ba 233.527†	12128.8	11953.8	[100]	ug/L	17:40:05
3	Be 313.107†	264092.1	264729.2	[100]	ug/L	17:40:00
3	Cd 226.502†	8637.0	8684.4	[100]	ug/L	17:40:05
3	Co 228.616†	4522.4	4520.1	[100]	ug/L	17:40:25
3	Cr 267.716†	9385.5	9168.2	[100]	ug/L	17:40:05
3	Cu 324.752†	43321.2	33667.8	[100]	ug/L	17:40:05
3	Mn 257.610†	88662.4	86693.8	[100]	ug/L	17:40:05
3	Mo 202.031†	1452.2	1418.7	[100]	ug/L	17:40:25
3	Ni 231.604†	4091.9	3946.9	[100]	ug/L	17:40:25
3	P 214.914†	1126.9	860.4	[500]	ug/L	17:40:25
3	Pb 220.353†	789.5	822.2	[100]	ug/L	17:40:25
3	S 181.975 Axial†	183.7	138.1	[200]	ug/L	17:40:25
3	Sb 206.836†	341.2	300.9	[100]	ug/L	17:40:25
3	Se 196.026†	162.9	184.0	[100]	ug/L	17:40:25
3	Si 251.611†	16322.8	15661.7	[500]	ug/L	17:40:05
3	Sn 189.927†	531.6	522.1	[100]	ug/L	17:40:25
3	Ti 334.940†	63004.8	63025.7	[100]	ug/L	17:40:05
3	Tl 190.801†	261.0	302.0	[100]	ug/L	17:40:25
3	U 409.014†	937.6	3716.6	[100]	ug/L	17:40:05
3	V 292.402†	13487.4	14740.9	[100]	ug/L	17:40:05
3	Zn 213.857†	11560.0	10456.9	[100]	ug/L	17:40:05
3	SiO2†	16282.8	15628.3	[1069.5]	ug/L	17:40:41

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1001340.7	5903.17	0.59%	100.94	%
Sc Radial	5476.7	108.02	1.97%	104	%
Y 371.029	865387.4	5002.58	0.58%	100.63	%
Y RADIAL	5731.0	105.69	1.84%	103.8	%
Ag 328.068†	23071.3	171.51	0.74%	[100]	ug/L
As 188.979†	237.1	8.03	3.39%	[100]	ug/L
B 249.677†	4101.3	44.84	1.09%	[100]	ug/L
Ba 233.527†	12006.4	106.93	0.89%	[100]	ug/L
Be 313.107†	267231.3	2222.11	0.83%	[100]	ug/L
Cd 226.502†	8750.9	75.42	0.86%	[100]	ug/L
Co 228.616†	4533.8	26.04	0.57%	[100]	ug/L
Cr 267.716†	9209.6	53.60	0.58%	[100]	ug/L
Cu 324.752†	33975.4	344.01	1.01%	[100]	ug/L
K 766.490 Radial†	5462.9	189.52	3.47%	[1000]	ug/L
Mn 257.610†	87172.5	566.90	0.65%	[100]	ug/L
Mo 202.031†	1416.1	7.21	0.51%	[100]	ug/L
Ni 231.604†	3966.1	23.18	0.58%	[100]	ug/L
P 214.914†	872.4	11.86	1.36%	[500]	ug/L
Pb 220.353†	821.8	8.71	1.06%	[100]	ug/L
S 181.975 Axial†	143.5	6.22	4.34%	[200]	ug/L
Sb 206.836†	295.1	6.80	2.31%	[100]	ug/L
Se 196.026†	181.5	2.58	1.42%	[100]	ug/L
Si 251.611†	15734.0	113.17	0.72%	[500]	ug/L
Sn 189.927†	527.3	4.61	0.87%	[100]	ug/L
Sr 421.552†	16290.5	208.03	1.28%	[100]	ug/L
Ti 334.940†	63356.2	492.60	0.78%	[100]	ug/L
Tl 190.801†	305.5	7.04	2.31%	[100]	ug/L
U 409.014†	3692.0	76.94	2.08%	[100]	ug/L
V 292.402†	14788.5	79.48	0.54%	[100]	ug/L
Zn 213.857†	10539.4	80.57	0.76%	[100]	ug/L
SiO2†	15782.4	138.81	0.88%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 1/29/2010 17:42:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5548.2	5548.2	105	%	17:44:43
1	Y RADIAL	5802.2	5802.2	105.1	%	17:44:43
1	Al 396.153Radial†	6194.8	5996.3	[5000]	ug/L	17:44:43
1	Ca 317.933Radial†	3132.6	2957.5	[5000]	ug/L	17:45:03
1	K 766.490 Radial†	31797.0	27568.3	[5000]	ug/L	17:44:43
1	Mg 279.077 IEC†	142.7	134.3	[5000]	ug/L	17:45:03
1	Sr 421.552†	85144.4	80880.2	[500]	ug/L	17:44:43
1	Sc 361.383	981962.6	981962.6	98.990	%	17:46:01
1	Y 371.029	839790.8	839790.8	97.655	%	17:46:01
1	Ag 328.068†	118177.9	119009.6	[500]	ug/L	17:46:06
1	As 188.979†	1185.0	1233.6	[500]	ug/L	17:46:26
1	B 249.677†	21345.9	21904.9	[500]	ug/L	17:46:06
1	Ba 233.527†	61828.1	62475.6	[500]	ug/L	17:46:06
1	Be 313.107†	1349285.3	1367860.2	[500]	ug/L	17:46:01
1	Cd 226.502†	44521.8	45159.7	[500]	ug/L	17:46:06
1	Co 228.616†	23703.4	24014.4	[500]	ug/L	17:46:06
1	Cr 267.716†	47379.5	47793.9	[500]	ug/L	17:46:06
1	Cu 324.752†	185874.5	178801.7	[500]	ug/L	17:46:06
1	Mn 257.610†	442124.6	446067.4	[500]	ug/L	17:46:01
1	Mo 202.031†	7282.0	7345.8	[500]	ug/L	17:46:26
1	Ni 231.604†	20887.1	21019.8	[500]	ug/L	17:46:06
1	P 214.914†	4766.0	4566.0	[2500]	ug/L	17:46:26
1	Pb 220.353†	4110.0	4197.1	[500]	ug/L	17:46:26
1	S 181.975 Axial†	793.8	759.1	[1000]	ug/L	17:46:26
1	Sb 206.836†	1580.9	1562.1	[500]	ug/L	17:46:26
1	Se 196.026†	899.9	932.8	[500]	ug/L	17:46:26
1	Si 251.611†	82223.7	82659.3	[2500]	ug/L	17:46:06
1	Sn 189.927†	2741.0	2767.9	[500]	ug/L	17:46:26
1	Ti 334.940†	323077.5	327389.9	[500]	ug/L	17:46:06
1	Tl 190.801†	1504.8	1565.2	[500]	ug/L	17:46:26
1	U 409.014†	17002.5	19969.9	[500]	ug/L	17:46:06
1	V 292.402†	75251.4	77485.7	[500]	ug/L	17:46:06
1	Zn 213.857†	55943.5	55593.7	[500]	ug/L	17:46:06
1	SiO2†	81224.8	81656.2	[5347.5]	ug/L	17:47:34
2	Sc Radial	5541.8	5541.8	105	%	17:45:08
2	Y RADIAL	5788.6	5788.6	104.8	%	17:45:08
2	Al 396.153Radial†	6205.5	6013.3	[5000]	ug/L	17:45:08
2	Ca 317.933Radial†	3127.0	2955.6	[5000]	ug/L	17:45:28
2	K 766.490 Radial†	31647.6	27460.7	[5000]	ug/L	17:45:08
2	Mg 279.077 IEC†	144.4	136.1	[5000]	ug/L	17:45:28
2	Sr 421.552†	84618.2	80472.1	[500]	ug/L	17:45:08
2	Sc 361.383	988046.2	988046.2	99.603	%	17:46:32
2	Y 371.029	847093.2	847093.2	98.504	%	17:46:32
2	Ag 328.068†	118329.2	118426.5	[500]	ug/L	17:46:37
2	As 188.979†	1185.4	1226.7	[500]	ug/L	17:46:57
2	B 249.677†	21336.9	21763.1	[500]	ug/L	17:46:37
2	Ba 233.527†	61894.8	62157.9	[500]	ug/L	17:46:37
2	Be 313.107†	1361916.6	1372149.2	[500]	ug/L	17:46:32
2	Cd 226.502†	44779.7	45141.8	[500]	ug/L	17:46:37
2	Co 228.616†	23811.5	23975.5	[500]	ug/L	17:46:37
2	Cr 267.716†	47534.0	47654.3	[500]	ug/L	17:46:37
2	Cu 324.752†	185673.7	177443.9	[500]	ug/L	17:46:37
2	Mn 257.610†	445054.8	446259.1	[500]	ug/L	17:46:32
2	Mo 202.031†	7231.9	7250.2	[500]	ug/L	17:46:57
2	Ni 231.604†	21001.7	21005.0	[500]	ug/L	17:46:37
2	P 214.914†	4736.5	4506.7	[2500]	ug/L	17:46:57
2	Pb 220.353†	4098.5	4160.0	[500]	ug/L	17:46:57
2	S 181.975 Axial†	789.1	749.5	[1000]	ug/L	17:46:57
2	Sb 206.836†	1564.8	1536.1	[500]	ug/L	17:46:57

2	Se 196.026†	890.7	918.0	[500]	ug/L	17:46:57
2	Si 251.611†	82424.9	82349.9	[2500]	ug/L	17:46:37
2	Sn 189.927†	2726.3	2736.0	[500]	ug/L	17:46:57
2	Ti 334.940†	323593.3	325898.1	[500]	ug/L	17:46:37
2	Tl 190.801†	1500.8	1551.9	[500]	ug/L	17:46:57
2	U 409.014†	16920.9	19782.2	[500]	ug/L	17:46:37
2	V 292.402†	75479.9	77247.0	[500]	ug/L	17:46:37
2	Zn 213.857†	56077.7	55380.5	[500]	ug/L	17:46:37
2	SiO2†	81740.6	81668.9	[5347.5]	ug/L	17:47:39
3	Sc Radial	5547.9	5547.9	105	%	17:45:34
3	Y RADIAL	5807.7	5807.7	105.2	%	17:45:34
3	Al 396.153Radial†	6207.0	6008.3	[5000]	ug/L	17:45:34
3	Ca 317.933Radial†	3146.2	2970.5	[5000]	ug/L	17:45:54
3	K 766.490 Radial†	31711.0	27488.1	[5000]	ug/L	17:45:34
3	Mg 279.077 IEC†	140.6	132.3	[5000]	ug/L	17:45:54
3	Sr 421.552†	85151.4	80891.2	[500]	ug/L	17:45:34
3	Sc 361.383	996608.4	996608.4	100.47	%	17:47:03
3	Y 371.029	851836.2	851836.2	99.055	%	17:47:03
3	Ag 328.068†	118000.8	117079.0	[500]	ug/L	17:47:08
3	As 188.979†	1175.3	1206.4	[500]	ug/L	17:47:28
3	B 249.677†	21387.5	21629.4	[500]	ug/L	17:47:08
3	Ba 233.527†	61517.6	61248.7	[500]	ug/L	17:47:08
3	Be 313.107†	1372664.4	1371099.9	[500]	ug/L	17:47:03
3	Cd 226.502†	44543.1	44520.0	[500]	ug/L	17:47:08
3	Co 228.616†	23635.9	23595.3	[500]	ug/L	17:47:08
3	Cr 267.716†	47336.1	47047.2	[500]	ug/L	17:47:08
3	Cu 324.752†	185028.4	175200.1	[500]	ug/L	17:47:08
3	Mn 257.610†	450399.2	447739.9	[500]	ug/L	17:47:03
3	Mo 202.031†	7259.4	7215.2	[500]	ug/L	17:47:28
3	Ni 231.604†	20801.2	20624.3	[500]	ug/L	17:47:08
3	P 214.914†	4764.0	4493.3	[2500]	ug/L	17:47:28
3	Pb 220.353†	4123.4	4149.5	[500]	ug/L	17:47:28
3	S 181.975 Axial†	777.3	731.0	[1000]	ug/L	17:47:28
3	Sb 206.836†	1582.8	1540.6	[500]	ug/L	17:47:28
3	Se 196.026†	889.5	909.1	[500]	ug/L	17:47:28
3	Si 251.611†	82055.4	81271.1	[2500]	ug/L	17:47:08
3	Sn 189.927†	2739.7	2725.9	[500]	ug/L	17:47:28
3	Ti 334.940†	321888.3	321409.9	[500]	ug/L	17:47:08
3	Tl 190.801†	1492.7	1530.8	[500]	ug/L	17:47:28
3	U 409.014†	17031.5	19746.3	[500]	ug/L	17:47:08
3	V 292.402†	75175.9	76293.4	[500]	ug/L	17:47:08
3	Zn 213.857†	55759.7	54580.3	[500]	ug/L	17:47:08
3	SiO2†	81972.6	81194.6	[5347.5]	ug/L	17:47:44

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	988872.4	7357.77	0.74%	99.686	%
Sc Radial	5545.9	3.58	0.06%	105	%
Y 371.029	846240.1	6067.85	0.72%	98.405	%
Y RADIAL	5799.5	9.86	0.17%	105.0	%
Ag 328.068†	118171.7	990.22	0.84%	[500]	ug/L
Al 396.153Radial†	6006.0	8.73	0.15%	[5000]	ug/L
As 188.979†	1222.2	14.15	1.16%	[500]	ug/L
B 249.677†	21765.8	137.75	0.63%	[500]	ug/L
Ba 233.527†	61960.7	636.80	1.03%	[500]	ug/L
Be 313.107†	1370369.8	2235.79	0.16%	[500]	ug/L
Ca 317.933Radial†	2961.2	8.14	0.27%	[5000]	ug/L
Cd 226.502†	44940.5	364.29	0.81%	[500]	ug/L
Co 228.616†	23861.7	231.57	0.97%	[500]	ug/L
Cr 267.716†	47498.5	396.97	0.84%	[500]	ug/L
Cu 324.752†	177148.6	1818.87	1.03%	[500]	ug/L
K 766.490 Radial†	27505.7	55.91	0.20%	[5000]	ug/L
Mg 279.077 IEC†	134.2	1.91	1.42%	[5000]	ug/L
Mn 257.610†	446688.8	915.31	0.20%	[500]	ug/L
Mo 202.031†	7270.4	67.61	0.93%	[500]	ug/L
Ni 231.604†	20883.0	224.21	1.07%	[500]	ug/L
P 214.914†	4522.0	38.69	0.86%	[2500]	ug/L
Pb 220.353†	4168.8	25.01	0.60%	[500]	ug/L
S 181.975 Axial†	746.5	14.31	1.92%	[1000]	ug/L

Sb 206.836†	1546.3	13.89	0.90%	[500]	ug/L
Se 196.026†	920.0	11.95	1.30%	[500]	ug/L
Si 251.611†	82093.4	728.76	0.89%	[2500]	ug/L
Sn 189.927†	2743.2	21.92	0.80%	[500]	ug/L
Sr 421.552†	80747.8	238.84	0.30%	[500]	ug/L
Ti 334.940†	324899.3	3112.61	0.96%	[500]	ug/L
Tl 190.801†	1549.3	17.35	1.12%	[500]	ug/L
U 409.014†	19832.8	120.06	0.61%	[500]	ug/L
V 292.402†	77008.7	630.85	0.82%	[500]	ug/L
Zn 213.857†	55184.8	534.31	0.97%	[500]	ug/L
SiO2†	81506.6	270.20	0.33%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 1/29/2010 17:49:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5446.6	5446.6	103	%	17:51:47
1	Y RADIAL	5724.7	5724.7	103.7	%	17:51:47
1	Al 396.153Radial†	12336.0	12053.4	[10000]	ug/L	17:51:47
1	Ca 317.933Radial†	6255.7	6037.5	[10000]	ug/L	17:51:47
1	Fe 238.204 Radial†	1110.2	1065.1	[10000]	ug/L	17:52:07
1	K 766.490 Radial†	60058.5	55501.2	[10000]	ug/L	17:51:47
1	Mg 279.077 IEC†	280.4	270.2	[10000]	ug/L	17:52:07
1	Na 589.592 Radial†	33048.8	32593.0	[10000]	ug/L	17:51:47
1	Sr 421.552†	167240.6	161893.9	[1000]	ug/L	17:51:47
1	Sc 361.383	980473.8	980473.8	98.840	%	17:53:05
1	Y 371.029	828872.3	828872.3	96.385	%	17:53:11
1	Ag 328.068†	235662.3	238054.7	[1000]	ug/L	17:53:11
1	As 188.979†	2376.7	2441.2	[1000]	ug/L	17:53:31
1	B 249.677†	43078.3	43925.2	[1000]	ug/L	17:53:11
1	Ba 233.527†	122967.5	124427.6	[1000]	ug/L	17:53:11
1	Be 313.107†	2711270.9	2747906.8	[1000]	ug/L	17:53:05
1	Cd 226.502†	88510.9	89733.7	[1000]	ug/L	17:53:11
1	Co 228.616†	47103.9	47726.0	[1000]	ug/L	17:53:11
1	Cr 267.716†	94361.3	95399.9	[1000]	ug/L	17:53:11
1	Cu 324.752†	363541.9	358840.2	[1000]	ug/L	17:53:11
1	Mn 257.610†	880435.2	890202.4	[1000]	ug/L	17:53:05
1	Mo 202.031†	14507.5	14667.2	[1000]	ug/L	17:53:31
1	Ni 231.604†	41223.9	41627.4	[1000]	ug/L	17:53:11
1	P 214.914†	9247.9	9107.8	[5000]	ug/L	17:53:31
1	Pb 220.353†	8219.4	8361.1	[1000]	ug/L	17:53:31
1	S 181.975 Axial†	1525.6	1500.8	[2000]	ug/L	17:53:31
1	Sb 206.836†	3135.3	3137.3	[1000]	ug/L	17:53:31
1	Se 196.026†	1783.6	1828.2	[1000]	ug/L	17:53:31
1	Si 251.611†	163916.4	165437.3	[5000]	ug/L	17:53:11
1	Sn 189.927†	5489.6	5553.0	[1000]	ug/L	17:53:31
1	Ti 334.940†	654276.8	662973.4	[1000]	ug/L	17:53:05
1	Tl 190.801†	3018.1	3098.5	[1000]	ug/L	17:53:31
1	U 409.014†	36299.9	39519.9	[1000]	ug/L	17:53:11
1	V 292.402†	152017.2	155268.3	[1000]	ug/L	17:53:11
1	Zn 213.857†	110110.4	110482.5	[1000]	ug/L	17:53:11
1	SiO2†	163924.5	165451.5	[10695]	ug/L	17:54:41
2	Sc Radial	5589.6	5589.6	106	%	17:52:12
2	Y RADIAL	5836.6	5836.6	105.7	%	17:52:12
2	Al 396.153Radial†	12630.3	12025.5	[10000]	ug/L	17:52:12
2	Ca 317.933Radial†	6418.9	6036.5	[10000]	ug/L	17:52:12
2	Fe 238.204 Radial†	1105.4	1033.0	[10000]	ug/L	17:52:32
2	K 766.490 Radial†	61500.7	55374.1	[10000]	ug/L	17:52:12
2	Mg 279.077 IEC†	277.5	260.5	[10000]	ug/L	17:52:32
2	Na 589.592 Radial†	34241.2	32899.5	[10000]	ug/L	17:52:12
2	Sr 421.552†	172765.9	162964.2	[1000]	ug/L	17:52:12
2	Sc 361.383	996858.7	996858.7	100.49	%	17:53:37
2	Y 371.029	830704.3	830704.3	96.598	%	17:53:43
2	Ag 328.068†	236063.9	234535.5	[1000]	ug/L	17:53:43
2	As 188.979†	2389.9	2414.7	[1000]	ug/L	17:54:03
2	B 249.677†	43311.9	43441.2	[1000]	ug/L	17:53:43
2	Ba 233.527†	123441.7	122854.7	[1000]	ug/L	17:53:43
2	Be 313.107†	2741186.2	2732588.8	[1000]	ug/L	17:53:37
2	Cd 226.502†	88757.7	88507.4	[1000]	ug/L	17:53:43
2	Co 228.616†	47198.6	47037.0	[1000]	ug/L	17:53:43
2	Cr 267.716†	94566.3	94034.8	[1000]	ug/L	17:53:43
2	Cu 324.752†	363781.7	353033.3	[1000]	ug/L	17:53:43
2	Mn 257.610†	890899.6	885974.4	[1000]	ug/L	17:53:37
2	Mo 202.031†	14564.0	14482.2	[1000]	ug/L	17:54:03
2	Ni 231.604†	41287.2	41004.9	[1000]	ug/L	17:53:43

2	P 214.914†	9279.6	8985.6	[5000]	ug/L	17:54:03
2	Pb 220.353†	8261.1	8265.8	[1000]	ug/L	17:54:03
2	S 181.975 Axial†	1525.2	1475.0	[2000]	ug/L	17:54:03
2	Sb 206.836†	3144.0	3093.7	[1000]	ug/L	17:54:03
2	Se 196.026†	1795.7	1810.6	[1000]	ug/L	17:54:03
2	Si 251.611†	164171.0	162964.9	[5000]	ug/L	17:53:43
2	Sn 189.927†	5510.8	5482.7	[1000]	ug/L	17:54:03
2	Ti 334.940†	661904.1	659683.2	[1000]	ug/L	17:53:37
2	Tl 190.801†	3041.3	3071.5	[1000]	ug/L	17:54:03
2	U 409.014†	36288.0	38904.4	[1000]	ug/L	17:53:43
2	V 292.402†	152323.2	153044.8	[1000]	ug/L	17:53:43
2	Zn 213.857†	110457.6	108996.9	[1000]	ug/L	17:53:43
2	SiO2†	164176.6	162976.4	[10695]	ug/L	17:54:46
3	Sc Radial	5486.0	5486.0	104	%	17:52:37
3	Y RADIAL	5747.1	5747.1	104.1	%	17:52:37
3	Al 396.153Radial†	12422.7	12051.1	[10000]	ug/L	17:52:37
3	Ca 317.933Radial†	6324.6	6060.3	[10000]	ug/L	17:52:37
3	Fe 238.204 Radial†	1107.9	1055.1	[10000]	ug/L	17:52:57
3	K 766.490 Radial†	60551.5	55557.8	[10000]	ug/L	17:52:37
3	Mg 279.077 IEC†	282.9	270.6	[10000]	ug/L	17:52:57
3	Na 589.592 Radial†	33440.8	32740.3	[10000]	ug/L	17:52:37
3	Sr 421.552†	169431.5	162838.2	[1000]	ug/L	17:52:37
3	Sc 361.383	990214.0	990214.0	99.821	%	17:54:10
3	Y 371.029	822611.5	822611.5	95.657	%	17:54:15
3	Ag 328.068†	233903.1	233947.1	[1000]	ug/L	17:54:15
3	As 188.979†	2394.2	2435.0	[1000]	ug/L	17:54:35
3	B 249.677†	42971.5	43389.5	[1000]	ug/L	17:54:15
3	Ba 233.527†	122005.8	122240.5	[1000]	ug/L	17:54:15
3	Be 313.107†	2733985.3	2743679.4	[1000]	ug/L	17:54:10
3	Cd 226.502†	87991.0	88332.0	[1000]	ug/L	17:54:15
3	Co 228.616†	46774.5	46927.2	[1000]	ug/L	17:54:15
3	Cr 267.716†	93702.0	93800.4	[1000]	ug/L	17:54:15
3	Cu 324.752†	359396.0	351068.9	[1000]	ug/L	17:54:15
3	Mn 257.610†	890018.6	891040.9	[1000]	ug/L	17:54:10
3	Mo 202.031†	14548.4	14563.9	[1000]	ug/L	17:54:35
3	Ni 231.604†	41028.7	41021.6	[1000]	ug/L	17:54:15
3	P 214.914†	9288.5	9056.5	[5000]	ug/L	17:54:35
3	Pb 220.353†	8253.7	8313.6	[1000]	ug/L	17:54:35
3	S 181.975 Axial†	1530.6	1490.6	[2000]	ug/L	17:54:35
3	Sb 206.836†	3161.5	3132.3	[1000]	ug/L	17:54:35
3	Se 196.026†	1799.6	1826.5	[1000]	ug/L	17:54:35
3	Si 251.611†	162562.7	162449.9	[5000]	ug/L	17:54:15
3	Sn 189.927†	5521.3	5530.0	[1000]	ug/L	17:54:35
3	Ti 334.940†	660948.3	663145.5	[1000]	ug/L	17:54:10
3	Tl 190.801†	3044.5	3095.0	[1000]	ug/L	17:54:35
3	U 409.014†	35928.1	38786.1	[1000]	ug/L	17:54:15
3	V 292.402†	150935.1	152671.4	[1000]	ug/L	17:54:15
3	Zn 213.857†	109405.4	108680.4	[1000]	ug/L	17:54:15
3	SiO2†	164534.0	164430.7	[10695]	ug/L	17:54:51

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	989182.2	8241.04	0.83%	99.717	%
Sc Radial	5507.4	73.87	1.34%	104	%
Y 371.029	827396.0	4243.56	0.51%	96.213	%
Y RADIAL	5769.4	59.22	1.03%	104.5	%
Ag 328.068†	235512.4	2221.25	0.94%	[1000]	ug/L
Al 396.153Radial†	12043.3	15.50	0.13%	[10000]	ug/L
As 188.979†	2430.3	13.83	0.57%	[1000]	ug/L
B 249.677†	43585.3	295.46	0.68%	[1000]	ug/L
Ba 233.527†	123174.3	1128.04	0.92%	[1000]	ug/L
Be 313.107†	2741391.7	7911.14	0.29%	[1000]	ug/L
Ca 317.933Radial†	6044.8	13.46	0.22%	[10000]	ug/L
Cd 226.502†	88857.7	763.70	0.86%	[1000]	ug/L
Co 228.616†	47230.1	432.98	0.92%	[1000]	ug/L
Cr 267.716†	94411.7	863.83	0.91%	[1000]	ug/L
Cu 324.752†	354314.1	4040.84	1.14%	[1000]	ug/L
Fe 238.204 Radial†	1051.1	16.43	1.56%	[10000]	ug/L
K 766.490 Radial†	55477.7	94.08	0.17%	[10000]	ug/L

Mg 279.077 IEC†	267.1	5.75	2.15%	[10000]	ug/L
Mn 257.610†	889072.6	2715.64	0.31%	[1000]	ug/L
Mo 202.031†	14571.1	92.70	0.64%	[1000]	ug/L
Na 589.592 Radial†	32744.3	153.26	0.47%	[10000]	ug/L
Ni 231.604†	41218.0	354.67	0.86%	[1000]	ug/L
P 214.914†	9050.0	61.37	0.68%	[5000]	ug/L
Pb 220.353†	8313.5	47.63	0.57%	[1000]	ug/L
S 181.975 Axial†	1488.8	12.97	0.87%	[2000]	ug/L
Sb 206.836†	3121.1	23.82	0.76%	[1000]	ug/L
Se 196.026†	1821.8	9.71	0.53%	[1000]	ug/L
Si 251.611†	163617.4	1597.03	0.98%	[5000]	ug/L
Sn 189.927†	5521.9	35.83	0.65%	[1000]	ug/L
Sr 421.552†	162565.4	584.95	0.36%	[1000]	ug/L
Ti 334.940†	661934.1	1951.21	0.29%	[1000]	ug/L
Tl 190.801†	3088.3	14.70	0.48%	[1000]	ug/L
U 409.014†	39070.2	393.98	1.01%	[1000]	ug/L
V 292.402†	153661.5	1404.01	0.91%	[1000]	ug/L
Zn 213.857†	109386.6	962.17	0.88%	[1000]	ug/L
SiO2†	164286.2	1243.87	0.76%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 1/29/2010 17:57:02
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	5423.6	5423.6	103	%	17:59:16
1	Y RADIAL	5649.5	5649.5	102.3	%	17:59:16
1	Al 396.153Radial†	63177.1	61548.5	[50000]	ug/L	17:58:56
1	Ca 317.933Radial†	30719.3	29854.8	[50000]	ug/L	17:58:56
1	Fe 238.204 Radial†	2163.7	2094.2	[20000]	ug/L	17:59:16
1	Mg 279.077 IEC†	1354.9	1316.4	[50000]	ug/L	17:59:16
1	Na 589.592 Radial†	66947.0	65695.6	[20000]	ug/L	17:58:56
1	Sc 361.383	967896.5	967896.5	97.572	%	18:00:13
1	Y 371.029	824832.1	824832.1	95.915	%	18:00:13
2	Sc Radial	5426.4	5426.4	103	%	17:59:41
2	Y RADIAL	5653.6	5653.6	102.4	%	17:59:41
2	Al 396.153Radial†	64106.8	62420.9	[50000]	ug/L	17:59:21
2	Ca 317.933Radial†	31104.0	30213.4	[50000]	ug/L	17:59:21
2	Fe 238.204 Radial†	2143.1	2073.1	[20000]	ug/L	17:59:41
2	Mg 279.077 IEC†	1346.8	1307.8	[50000]	ug/L	17:59:41
2	Na 589.592 Radial†	67385.4	66088.5	[20000]	ug/L	17:59:21
2	Sc 361.383	955330.0	955330.0	96.305	%	18:00:19
2	Y 371.029	814662.5	814662.5	94.733	%	18:00:19
3	Sc Radial	5459.1	5459.1	103	%	18:00:06
3	Y RADIAL	5691.4	5691.4	103.0	%	18:00:06
3	Al 396.153Radial†	64032.1	61975.2	[50000]	ug/L	17:59:46
3	Ca 317.933Radial†	31103.1	30031.3	[50000]	ug/L	17:59:46
3	Fe 238.204 Radial†	2160.8	2077.8	[20000]	ug/L	18:00:06
3	Mg 279.077 IEC†	1347.3	1300.4	[50000]	ug/L	18:00:06
3	Na 589.592 Radial†	67046.3	65368.2	[20000]	ug/L	17:59:46
3	Sc 361.383	963362.2	963362.2	97.115	%	18:00:24
3	Y 371.029	821494.1	821494.1	95.527	%	18:00:24

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	962196.2	6363.89	0.66%	96.997	%
Sc Radial	5436.4	19.74	0.36%	103	%
Y 371.029	820329.6	5183.85	0.63%	95.392	%
Y RADIAL	5664.8	23.08	0.41%	102.6	%
Al 396.153Radial†	61981.5	436.22	0.70%	[50000]	ug/L
Ca 317.933Radial†	30033.2	179.32	0.60%	[50000]	ug/L
Fe 238.204 Radial†	2081.7	11.12	0.53%	[20000]	ug/L
Mg 279.077 IEC†	1308.2	7.99	0.61%	[50000]	ug/L
Na 589.592 Radial†	65717.5	360.64	0.55%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	235.6	0.00000	0.999997	
Al 396.153Radial	3	Lin Thru 0	0.0	1.238	0.00000	0.999981	
As 188.979	3	Lin Thru 0	0.0	2.433	0.00000	0.999995	
B 249.677	3	Lin Thru 0	0.0	43.55	0.00000	0.999986	
Ba 233.527	3	Lin Thru 0	0.0	123.3	0.00000	0.999994	
Be 313.107	3	Lin Thru 0	0.0	2741	0.00000	0.999998	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6007	0.00000	0.999998	
Cd 226.502	3	Lin Thru 0	0.0	89.05	0.00000	0.999988	
Co 228.616	3	Lin Thru 0	0.0	47.31	0.00000	0.999984	
Cr 267.716	3	Lin Thru 0	0.0	94.51	0.00000	0.999994	
Cu 324.752	3	Lin Thru 0	0.0	354.2	0.00000	0.999993	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1043	0.00000	0.999992	
K 766.490 Radial	3	Lin Thru 0	0.0	5.538	0.00000	0.999994	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0262	0.00000	0.999989
Mn 257.610	3	Lin Thru 0	0.0	889.8	0.00000	0.999996
Mo 202.031	3	Lin Thru 0	0.0	14.56	0.00000	0.999997
Na 589.592 Radia	2	Lin Thru 0	0.0	3.284	0.00000	0.999999
Ni 231.604	3	Lin Thru 0	0.0	41.31	0.00000	0.999980
P 214.914	3	Lin Thru 0	0.0	1.809	0.00000	0.999995
Pb 220.353	3	Lin Thru 0	0.0	8.318	0.00000	0.999999
S 181.975 Axial	3	Lin Thru 0	0.0	0.7446	0.00000	0.999994
Sb 206.836	3	Lin Thru 0	0.0	3.114	0.00000	0.999982
Se 196.026	3	Lin Thru 0	0.0	1.825	0.00000	0.999992
Si 251.611	3	Lin Thru 0	0.0	32.74	0.00000	0.999993
Sn 189.927	3	Lin Thru 0	0.0	5.513	0.00000	0.999989
Sr 421.552	3	Lin Thru 0	0.0	162.4	0.00000	0.999997
Ti 334.940	3	Lin Thru 0	0.0	659.3	0.00000	0.999967
Tl 190.801	3	Lin Thru 0	0.0	3.090	0.00000	0.999999
U 409.014	3	Lin Thru 0	0.0	39.17	0.00000	0.999968
V 292.402	3	Lin Thru 0	0.0	153.7	0.00000	0.999994
Zn 213.857	3	Lin Thru 0	0.0	109.5	0.00000	0.999988
SiO2	3	Lin Thru 0	0.0	15.33	0.00000	0.999990

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 1/29/2010 18:02:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5597.7	5597.7	106	%			18:04:29
1	Y RADIAL	5847.2	5847.2	105.9	%			18:04:29
1	Al 396.153Radial†	6220.8	5968.7	4795.5	ug/L	4795.5	ppb	18:04:29
1	Ca 317.933Radial†	3159.0	2956.0	4920.6	ug/L	4920.6	ppb	18:04:50
1	Fe 238.204 Radial†	580.8	537.2	5166.2	ug/L	5166.2	ppb	18:04:50
1	K 766.490 Radial†	17100.1	13452.0	2425.6	ug/L	2425.6	ppb	18:04:29
1	Mg 279.077 IEC†	150.1	140.0	5347.2	ug/L	5347.2	ppb	18:04:50
1	Na 589.592 Radial†	8520.4	8616.3	2624.0	ug/L	2624.0	ppb	18:04:29
1	Sr 421.552†	91747.1	86385.0	532.03	ug/L	532.03	ppb	18:04:29
1	Sc 361.383	988207.7	988207.7	99.619	%			18:05:47
1	Y 371.029	850188.3	850188.3	98.864	%			18:05:47
1	Ag 328.068†	60915.8	60774.1	261.18	ug/L	261.18	ppb	18:05:47
1	As 188.979†	1109.1	1149.9	476.92	ug/L	476.92	ppb	18:06:07
1	B 249.677†	22344.6	22771.1	520.55	ug/L	520.55	ppb	18:05:47
1	Ba 233.527†	62766.5	63022.8	512.42	ug/L	512.42	ppb	18:05:47
1	Be 313.107†	709094.8	716608.2	262.60	ug/L	262.60	ppb	18:05:47
1	Cd 226.502†	43330.5	43679.7	490.39	ug/L	490.39	ppb	18:06:07
1	Co 228.616†	23708.8	23868.5	504.64	ug/L	504.64	ppb	18:06:07
1	Cr 267.716†	46285.4	46393.1	491.51	ug/L	491.51	ppb	18:05:47
1	Cu 324.752†	189943.0	181699.1	513.00	ug/L	513.00	ppb	18:05:47
1	Mn 257.610†	457480.3	458659.1	515.76	ug/L	515.76	ppb	18:05:47
1	Mo 202.031†	7786.3	7805.5	536.48	ug/L	536.48	ppb	18:06:07
1	Ni 231.604†	20653.2	20651.7	499.56	ug/L	499.56	ppb	18:06:07
1	P 214.914†	4791.1	4560.8	2421.0	ug/L	2421.0	ppb	18:06:07
1	Pb 220.353†	4120.5	4181.4	504.39	ug/L	504.39	ppb	18:06:07
1	S 181.975 Axial†	1890.7	1855.1	2490.5	ug/L	2490.5	ppb	18:06:07
1	Sb 206.836†	1572.3	1543.5	515.14	ug/L	515.14	ppb	18:06:07
1	Se 196.026†	4611.4	4652.7	2567.9	ug/L	2567.9	ppb	18:06:07
1	Si 251.611†	158860.5	159064.2	4852.4	ug/L	4852.4	ppb	18:05:47
1	Sn 189.927†	2939.6	2949.7	535.89	ug/L	535.89	ppb	18:06:07
1	Ti 334.940†	326017.2	328278.2	497.75	ug/L	497.75	ppb	18:05:47
1	Tl 190.801†	1583.6	1634.7	532.44	ug/L	532.44	ppb	18:06:07
1	U 409.014†	16022.5	18877.6	480.24	ug/L	480.24	ppb	18:05:47
1	V 292.402†	76429.0	78187.4	515.89	ug/L	515.89	ppb	18:05:47
1	Zn 213.857†	56644.8	55940.5	506.26	ug/L	506.26	ppb	18:05:47
1	SiO2†	158342.6	158550.3	10326	ug/L	10326	ppb	18:07:05
2	Sc Radial	5623.3	5623.3	107	%			18:04:55
2	Y RADIAL	5881.4	5881.4	106.5	%			18:04:55
2	Al 396.153Radial†	6221.0	5942.2	4774.5	ug/L	4774.5	ppb	18:04:55
2	Ca 317.933Radial†	3120.0	2905.9	4837.3	ug/L	4837.3	ppb	18:05:15
2	Fe 238.204 Radial†	573.1	527.6	5073.5	ug/L	5073.5	ppb	18:05:15
2	K 766.490 Radial†	17119.8	13397.2	2415.8	ug/L	2415.8	ppb	18:04:55
2	Mg 279.077 IEC†	143.4	133.1	5082.5	ug/L	5082.5	ppb	18:05:15
2	Na 589.592 Radial†	8444.0	8508.2	2591.1	ug/L	2591.1	ppb	18:04:55
2	Sr 421.552†	91867.2	86105.0	530.31	ug/L	530.31	ppb	18:04:55
2	Sc 361.383	994591.3	994591.3	100.26	%			18:06:13
2	Y 371.029	856910.0	856910.0	99.645	%			18:06:13
2	Ag 328.068†	61102.0	60567.4	260.27	ug/L	260.27	ppb	18:06:13
2	As 188.979†	1113.8	1147.4	475.89	ug/L	475.89	ppb	18:06:33
2	B 249.677†	22396.9	22679.4	518.47	ug/L	518.47	ppb	18:06:13
2	Ba 233.527†	63027.9	62879.2	511.25	ug/L	511.25	ppb	18:06:13
2	Be 313.107†	714189.3	717120.8	262.78	ug/L	262.78	ppb	18:06:13
2	Cd 226.502†	43132.7	43203.3	485.04	ug/L	485.04	ppb	18:06:33
2	Co 228.616†	23597.3	23604.5	499.05	ug/L	499.05	ppb	18:06:33
2	Cr 267.716†	46650.9	46459.4	492.21	ug/L	492.21	ppb	18:06:13
2	Cu 324.752†	190254.0	180785.5	510.41	ug/L	510.41	ppb	18:06:13
2	Mn 257.610†	459845.6	458070.8	515.10	ug/L	515.10	ppb	18:06:13
2	Mo 202.031†	7739.7	7708.9	529.84	ug/L	529.84	ppb	18:06:33
2	Ni 231.604†	20589.0	20454.6	494.79	ug/L	494.79	ppb	18:06:33

2	P 214.914†	4758.5	4497.4	2386.5 ug/L	2386.5 ppb	18:06:33
2	Pb 220.353†	4108.1	4142.5	499.70 ug/L	499.70 ppb	18:06:33
2	S 181.975 Axial†	1875.0	1827.3	2453.2 ug/L	2453.2 ppb	18:06:33
2	Sb 206.836†	1575.8	1536.8	512.76 ug/L	512.76 ppb	18:06:33
2	Se 196.026†	4584.6	4596.3	2536.7 ug/L	2536.7 ppb	18:06:33
2	Si 251.611†	159527.0	158705.5	4841.5 ug/L	4841.5 ppb	18:06:13
2	Sn 189.927†	2926.7	2917.9	530.10 ug/L	530.10 ppb	18:06:33
2	Ti 334.940†	327887.2	328042.9	497.41 ug/L	497.41 ppb	18:06:13
2	Tl 190.801†	1577.8	1618.7	527.26 ug/L	527.26 ppb	18:06:33
2	U 409.014†	16193.9	18945.3	481.98 ug/L	481.98 ppb	18:06:13
2	V 292.402†	76881.6	78146.4	515.54 ug/L	515.54 ppb	18:06:13
2	Zn 213.857†	56969.6	55899.5	505.93 ug/L	505.93 ppb	18:06:13
2	SiO2†	157805.2	156994.1	10225 ug/L	10225 ppb	18:07:10
3	Sc Radial	5707.9	5707.9	108 %		18:05:20
3	Y RADIAL	5945.3	5945.3	107.6 %		18:05:20
3	Al 396.153Radial†	6332.1	5958.4	4787.3 ug/L	4787.3 ppb	18:05:20
3	Ca 317.933Radial†	3136.9	2878.1	4791.0 ug/L	4791.0 ppb	18:05:40
3	Fe 238.204 Radial†	576.3	522.5	5025.1 ug/L	5025.1 ppb	18:05:40
3	K 766.490 Radial†	17271.0	13298.9	2398.0 ug/L	2398.0 ppb	18:05:20
3	Mg 279.077 IEC†	148.0	135.4	5171.7 ug/L	5171.7 ppb	18:05:40
3	Na 589.592 Radial†	8529.3	8469.6	2579.4 ug/L	2579.4 ppb	18:05:20
3	Sr 421.552†	93058.9	85929.0	529.23 ug/L	529.23 ppb	18:05:20
3	Sc 361.383	986721.6	986721.6	99.469 %		18:06:39
3	Y 371.029	849227.0	849227.0	98.752 %		18:06:39
3	Ag 328.068†	60589.7	60538.4	260.12 ug/L	260.12 ppb	18:06:39
3	As 188.979†	1122.0	1164.5	482.86 ug/L	482.86 ppb	18:06:59
3	B 249.677†	22226.4	22686.1	518.61 ug/L	518.61 ppb	18:06:39
3	Ba 233.527†	62494.4	62844.2	510.96 ug/L	510.96 ppb	18:06:39
3	Be 313.107†	706993.3	715567.6	262.22 ug/L	262.22 ppb	18:06:39
3	Cd 226.502†	43262.9	43677.3	490.37 ug/L	490.37 ppb	18:06:59
3	Co 228.616†	23692.3	23887.8	505.05 ug/L	505.05 ppb	18:06:59
3	Cr 267.716†	46180.6	46357.7	491.13 ug/L	491.13 ppb	18:06:39
3	Cu 324.752†	189187.7	181226.9	511.66 ug/L	511.66 ppb	18:06:39
3	Mn 257.610†	455583.9	457444.3	514.39 ug/L	514.39 ppb	18:06:39
3	Mo 202.031†	7764.6	7795.4	535.78 ug/L	535.78 ppb	18:06:59
3	Ni 231.604†	20609.0	20638.5	499.24 ug/L	499.24 ppb	18:06:59
3	P 214.914†	4775.9	4552.7	2416.9 ug/L	2416.9 ppb	18:06:59
3	Pb 220.353†	4133.7	4200.9	506.74 ug/L	506.74 ppb	18:06:59
3	S 181.975 Axial†	1884.5	1851.8	2486.0 ug/L	2486.0 ppb	18:06:59
3	Sb 206.836†	1576.5	1550.1	517.27 ug/L	517.27 ppb	18:06:59
3	Se 196.026†	4610.8	4659.2	2571.0 ug/L	2571.0 ppb	18:06:59
3	Si 251.611†	158172.4	158612.6	4838.6 ug/L	4838.6 ppb	18:06:39
3	Sn 189.927†	2947.6	2962.2	538.13 ug/L	538.13 ppb	18:06:59
3	Ti 334.940†	324886.1	327634.0	496.77 ug/L	496.77 ppb	18:06:39
3	Tl 190.801†	1582.3	1635.8	532.78 ug/L	532.78 ppb	18:06:59
3	U 409.014†	16048.2	18927.6	481.53 ug/L	481.53 ppb	18:06:39
3	V 292.402†	75995.0	77866.7	513.81 ug/L	513.81 ppb	18:06:39
3	Zn 213.857†	56475.8	55856.3	505.51 ug/L	505.51 ppb	18:06:39
3	SiO2†	158555.0	159003.2	10356 ug/L	10356 ppb	18:07:15

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	989840.2	99.784	%	0.4215				0.42%
Sc Radial	5643.0	107	%	1.1				1.02%
Y 371.029	852108.4	99.087	%	0.4868				0.49%
Y RADIAL	5891.3	106.7	%	0.90				0.85%
Ag 328.068†	60626.6	260.52	ug/L	0.571	260.52	ppb	0.571	0.22%
QC value within limits for Ag 328.068 Recovery = 104.21%								
Al 396.153Radial†	5956.4	4785.8	ug/L	10.60	4785.8	ppb	10.60	0.22%
QC value within limits for Al 396.153Radial Recovery = 95.72%								
As 188.979†	1153.9	478.56	ug/L	3.763	478.56	ppb	3.763	0.79%
QC value within limits for As 188.979 Recovery = 95.71%								
B 249.677†	22712.2	519.21	ug/L	1.159	519.21	ppb	1.159	0.22%
QC value within limits for B 249.677 Recovery = 103.84%								
Ba 233.527†	62915.4	511.55	ug/L	0.772	511.55	ppb	0.772	0.15%
QC value within limits for Ba 233.527 Recovery = 102.31%								
Be 313.107†	716432.2	262.53	ug/L	0.290	262.53	ppb	0.290	0.11%
QC value within limits for Be 313.107 Recovery = 105.01%								
Ca 317.933Radial†	2913.3	4849.7	ug/L	65.70	4849.7	ppb	65.70	1.35%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.99%
Cd 226.502†            43520.1      488.60 ug/L         3.081      488.60 ppb          3.081   0.63%
   QC value within limits for Cd 226.502  Recovery = 97.72%
Co 228.616†            23786.9      502.91 ug/L         3.353      502.91 ppb          3.353   0.67%
   QC value within limits for Co 228.616  Recovery = 100.58%
Cr 267.716†            46403.4      491.62 ug/L         0.548      491.62 ppb          0.548   0.11%
   QC value within limits for Cr 267.716  Recovery = 98.32%
Cu 324.752†           181237.2      511.69 ug/L         1.293      511.69 ppb          1.293   0.25%
   QC value within limits for Cu 324.752  Recovery = 102.34%
Fe 238.204 Radial†       529.1      5088.3 ug/L        71.70      5088.3 ppb         71.70   1.41%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.77%
K 766.490 Radial†      13382.7      2413.1 ug/L        13.97      2413.1 ppb         13.97   0.58%
   QC value within limits for K 766.490 Radial  Recovery = 96.52%
Mg 279.077 IEC†          136.2      5200.5 ug/L       134.67      5200.5 ppb        134.67   2.59%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.01%
Mn 257.610†           458058.0      515.08 ug/L         0.686      515.08 ppb          0.686   0.13%
   QC value within limits for Mn 257.610  Recovery = 103.02%
Mo 202.031†             7769.9      534.03 ug/L         3.650      534.03 ppb          3.650   0.68%
   QC value within limits for Mo 202.031  Recovery = 106.81%
Na 589.592 Radial†      8531.3      2598.2 ug/L        23.16      2598.2 ppb         23.16   0.89%
   QC value within limits for Na 589.592 Radial  Recovery = 103.93%
Ni 231.604†            20581.6      497.87 ug/L         2.666      497.87 ppb          2.666   0.54%
   QC value within limits for Ni 231.604  Recovery = 99.57%
P 214.914†              4536.9      2408.1 ug/L        18.87      2408.1 ppb         18.87   0.78%
   QC value within limits for P 214.914  Recovery = 96.33%
Pb 220.353†             4174.9      503.61 ug/L         3.586      503.61 ppb          3.586   0.71%
   QC value within limits for Pb 220.353  Recovery = 100.72%
S 181.975 Axial†        1844.7      2476.6 ug/L        20.37      2476.6 ppb         20.37   0.82%
   QC value within limits for S 181.975 Axial  Recovery = 99.06%
Sb 206.836†             1543.5      515.06 ug/L         2.256      515.06 ppb          2.256   0.44%
   QC value within limits for Sb 206.836  Recovery = 103.01%
Se 196.026†             4636.1      2558.6 ug/L        18.97      2558.6 ppb         18.97   0.74%
   QC value within limits for Se 196.026  Recovery = 102.34%
Si 251.611†           158794.1      4844.2 ug/L         7.27      4844.2 ppb          7.27   0.15%
   QC value within limits for Si 251.611  Recovery = 96.88%
Sn 189.927†             2943.3      534.71 ug/L         4.145      534.71 ppb          4.145   0.78%
   QC value within limits for Sn 189.927  Recovery = 106.94%
Sr 421.552†            86139.7      530.52 ug/L         1.416      530.52 ppb          1.416   0.27%
   QC value within limits for Sr 421.552  Recovery = 106.10%
Ti 334.940†           327985.0      497.31 ug/L         0.497      497.31 ppb          0.497   0.10%
   QC value within limits for Ti 334.940  Recovery = 99.46%
Tl 190.801†             1629.7      530.83 ug/L         3.090      530.83 ppb          3.090   0.58%
   QC value within limits for Tl 190.801  Recovery = 106.17%
U 409.014†             18916.8      481.25 ug/L         0.903      481.25 ppb          0.903   0.19%
   QC value within limits for U 409.014  Recovery = 96.25%
V 292.402†             78066.8      515.08 ug/L         1.112      515.08 ppb          1.112   0.22%
   QC value within limits for V 292.402  Recovery = 103.02%
Zn 213.857†            55898.8      505.90 ug/L         0.377      505.90 ppb          0.377   0.07%
   QC value within limits for Zn 213.857  Recovery = 101.18%
SiO2†                 158182.5       10302 ug/L          68.6       10302 ppb           68.6   0.67%
   QC value within limits for SiO2  Recovery = 96.33%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 1/29/2010 18:09:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5689.2	5689.2	108	%			18:11:19
1	Y RADIAL	5986.6	5986.6	108.4	%			18:11:19
1	Al 396.153Radial†	-117.3	-1.9	-1.5125	ug/L	-1.5125	ppb	18:11:40
1	Ca 317.933Radial†	21.5	-0.7	-1.2289	ug/L	-1.2289	ppb	18:11:40
1	Fe 238.204 Radial†	6.3	-4.2	-40.696	ug/L	-40.696	ppb	18:11:40
1	K 766.490 Radial†	2771.1	-92.0	-16.624	ug/L	-16.624	ppb	18:11:19
1	Mg 279.077 IEC†	5.4	3.6	139.01	ug/L	139.01	ppb	18:11:40
1	Na 589.592 Radial†	-570.2	59.0	17.962	ug/L	17.962	ppb	18:11:19
1	Sr 421.552†	50.4	-20.0	-0.1234	ug/L	-0.1234	ppb	18:11:19
1	Sc 361.383	996473.8	996473.8	100.45	%			18:12:36
1	Y 371.029	865083.0	865083.0	100.60	%			18:12:36
1	Ag 328.068†	406.7	30.3	0.1187	ug/L	0.1187	ppb	18:12:41
1	As 188.979†	-29.4	7.3	2.9789	ug/L	2.9789	ppb	18:13:01
1	B 249.677†	-65.5	275.9	6.3408	ug/L	6.3408	ppb	18:13:01
1	Ba 233.527†	-17.3	-0.8	-0.0081	ug/L	-0.0081	ppb	18:13:01
1	Be 313.107†	-4591.4	231.8	0.0849	ug/L	0.0849	ppb	18:12:41
1	Cd 226.502†	-188.3	-3.9	-0.0409	ug/L	-0.0409	ppb	18:13:01
1	Co 228.616†	-72.0	-2.6	-0.0549	ug/L	-0.0549	ppb	18:13:01
1	Cr 267.716†	78.2	8.6	0.0914	ug/L	0.0914	ppb	18:13:01
1	Cu 324.752†	8984.8	-25.8	-0.0728	ug/L	-0.0728	ppb	18:12:41
1	Mn 257.610†	539.7	-32.9	-0.0466	ug/L	-0.0466	ppb	18:13:01
1	Mo 202.031†	12.5	1.9	0.1258	ug/L	0.1258	ppb	18:13:01
1	Ni 231.604†	77.3	-3.5	-0.0850	ug/L	-0.0850	ppb	18:13:01
1	P 214.914†	246.2	-3.6	-1.9416	ug/L	-1.9416	ppb	18:13:01
1	Pb 220.353†	-27.8	17.4	2.0991	ug/L	2.0991	ppb	18:13:01
1	S 181.975 Axial†	41.2	-1.7	-2.3280	ug/L	-2.3280	ppb	18:13:01
1	Sb 206.836†	36.7	1.7	0.5512	ug/L	0.5512	ppb	18:13:01
1	Se 196.026†	-25.1	-1.3	-0.8457	ug/L	-0.8457	ppb	18:13:01
1	Si 251.611†	409.1	3.6	0.1085	ug/L	0.1085	ppb	18:13:01
1	Sn 189.927†	5.6	4.4	0.8032	ug/L	0.8032	ppb	18:13:01
1	Ti 334.940†	-937.2	81.7	0.1141	ug/L	0.1141	ppb	18:12:41
1	Tl 190.801†	-33.2	12.0	3.8849	ug/L	3.8849	ppb	18:13:01
1	U 409.014†	-2963.3	-156.2	-3.9828	ug/L	-3.9828	ppb	18:12:36
1	V 292.402†	-1478.2	-5.4	-0.0322	ug/L	-0.0322	ppb	18:12:41
1	Zn 213.857†	917.3	-7.6	-0.0648	ug/L	-0.0648	ppb	18:13:01
1	SiO2†	446.8	47.1	3.0709	ug/L	3.0709	ppb	18:14:07
2	Sc Radial	5498.2	5498.2	104	%			18:11:45
2	Y RADIAL	5808.1	5808.1	105.2	%			18:11:45
2	Al 396.153Radial†	-117.6	-5.9	-4.7929	ug/L	-4.7929	ppb	18:12:05
2	Ca 317.933Radial†	20.3	-1.2	-1.9618	ug/L	-1.9618	ppb	18:12:05
2	Fe 238.204 Radial†	10.5	0.0	0.4070	ug/L	0.4070	ppb	18:12:05
2	K 766.490 Radial†	2647.5	-121.3	-21.917	ug/L	-21.917	ppb	18:11:45
2	Mg 279.077 IEC†	1.6	0.2	7.4787	ug/L	7.4787	ppb	18:12:05
2	Na 589.592 Radial†	-561.4	49.1	14.938	ug/L	14.938	ppb	18:11:45
2	Sr 421.552†	44.3	-24.2	-0.1493	ug/L	-0.1493	ppb	18:11:45
2	Sc 361.383	1005796.7	1005796.7	101.39	%			18:13:07
2	Y 371.029	871720.6	871720.6	101.37	%			18:13:07
2	Ag 328.068†	466.5	85.5	0.3606	ug/L	0.3606	ppb	18:13:12
2	As 188.979†	-33.2	3.8	1.5579	ug/L	1.5579	ppb	18:13:32
2	B 249.677†	-83.0	259.2	5.9518	ug/L	5.9518	ppb	18:13:32
2	Ba 233.527†	-15.8	0.9	0.0071	ug/L	0.0071	ppb	18:13:32
2	Be 313.107†	-4731.9	135.6	0.0497	ug/L	0.0497	ppb	18:13:12
2	Cd 226.502†	-187.5	-1.4	-0.0149	ug/L	-0.0149	ppb	18:13:32
2	Co 228.616†	-63.4	6.6	0.1396	ug/L	0.1396	ppb	18:13:32
2	Cr 267.716†	57.7	-12.3	-0.1319	ug/L	-0.1319	ppb	18:13:32
2	Cu 324.752†	8944.3	-148.6	-0.4216	ug/L	-0.4216	ppb	18:13:12
2	Mn 257.610†	519.2	-58.0	-0.0655	ug/L	-0.0655	ppb	18:13:32
2	Mo 202.031†	17.8	6.9	0.4760	ug/L	0.4760	ppb	18:13:32
2	Ni 231.604†	84.1	2.4	0.0592	ug/L	0.0592	ppb	18:13:32

2	P 214.914†	246.5	-5.6	-3.0050 ug/L	-3.0050 ppb	18:13:32
2	Pb 220.353†	-32.5	13.1	1.5715 ug/L	1.5715 ppb	18:13:32
2	S 181.975 Axial†	45.7	2.4	3.1662 ug/L	3.1662 ppb	18:13:32
2	Sb 206.836†	31.9	-3.4	-1.0496 ug/L	-1.0496 ppb	18:13:32
2	Se 196.026†	-20.2	3.8	2.0848 ug/L	2.0848 ppb	18:13:32
2	Si 251.611†	385.2	-23.7	-0.7301 ug/L	-0.7301 ppb	18:13:32
2	Sn 189.927†	7.6	6.4	1.1541 ug/L	1.1541 ppb	18:13:32
2	Ti 334.940†	-970.7	57.3	0.0845 ug/L	0.0845 ppb	18:13:12
2	Tl 190.801†	-43.6	2.1	0.6663 ug/L	0.6663 ppb	18:13:32
2	U 409.014†	-2692.7	138.1	3.5253 ug/L	3.5253 ppb	18:13:07
2	V 292.402†	-1476.6	9.9	0.0780 ug/L	0.0780 ppb	18:13:12
2	Zn 213.857†	932.8	-0.8	-0.0071 ug/L	-0.0071 ppb	18:13:32
2	SiO2†	406.9	3.6	0.2247 ug/L	0.2247 ppb	18:14:12
3	Sc Radial	5558.5	5558.5	105 %		18:12:10
3	Y RADIAL	5849.4	5849.4	105.9 %		18:12:10
3	Al 396.153Radial†	-115.3	-2.5	-2.0950 ug/L	-2.0950 ppb	18:12:30
3	Ca 317.933Radial†	17.8	-3.8	-6.3651 ug/L	-6.3651 ppb	18:12:30
3	Fe 238.204 Radial†	8.2	-2.3	-22.159 ug/L	-22.159 ppb	18:12:30
3	K 766.490 Radial†	2575.6	-217.1	-39.200 ug/L	-39.200 ppb	18:12:10
3	Mg 279.077 IEC†	0.9	-0.6	-20.971 ug/L	-20.971 ppb	18:12:30
3	Na 589.592 Radial†	-652.5	-31.6	-9.6177 ug/L	-9.6177 ppb	18:12:10
3	Sr 421.552†	80.8	10.0	0.0615 ug/L	0.0615 ppb	18:12:10
3	Sc 361.383	993464.3	993464.3	100.15 %		18:13:37
3	Y 371.029	863920.1	863920.1	100.46 %		18:13:37
3	Ag 328.068†	323.1	-51.9	-0.2264 ug/L	-0.2264 ppb	18:13:42
3	As 188.979†	-35.1	1.4	0.5812 ug/L	0.5812 ppb	18:14:02
3	B 249.677†	-89.5	251.8	5.7844 ug/L	5.7844 ppb	18:14:02
3	Ba 233.527†	-11.9	4.5	0.0358 ug/L	0.0358 ppb	18:14:02
3	Be 313.107†	-4646.2	163.2	0.0595 ug/L	0.0595 ppb	18:13:42
3	Cd 226.502†	-169.9	13.9	0.1580 ug/L	0.1580 ppb	18:14:02
3	Co 228.616†	-67.8	1.4	0.0327 ug/L	0.0327 ppb	18:14:02
3	Cr 267.716†	41.3	-28.1	-0.2970 ug/L	-0.2970 ppb	18:14:02
3	Cu 324.752†	9198.2	214.4	0.6045 ug/L	0.6045 ppb	18:13:42
3	Mn 257.610†	516.4	-54.5	-0.0626 ug/L	-0.0626 ppb	18:14:02
3	Mo 202.031†	27.5	16.9	1.1557 ug/L	1.1557 ppb	18:14:02
3	Ni 231.604†	80.6	0.0	0.0011 ug/L	0.0011 ppb	18:14:02
3	P 214.914†	249.6	0.5	0.2032 ug/L	0.2032 ppb	18:14:02
3	Pb 220.353†	-43.8	1.4	0.1757 ug/L	0.1757 ppb	18:14:02
3	S 181.975 Axial†	50.3	7.4	10.004 ug/L	10.004 ppb	18:14:02
3	Sb 206.836†	48.5	13.6	4.4065 ug/L	4.4065 ppb	18:14:02
3	Se 196.026†	-25.5	-1.7	-1.0129 ug/L	-1.0129 ppb	18:14:02
3	Si 251.611†	406.9	2.7	0.0681 ug/L	0.0681 ppb	18:14:02
3	Sn 189.927†	8.4	7.3	1.3261 ug/L	1.3261 ppb	18:14:02
3	Ti 334.940†	-1026.7	-10.5	-0.0148 ug/L	-0.0148 ppb	18:13:42
3	Tl 190.801†	-36.4	8.7	2.7990 ug/L	2.7990 ppb	18:14:02
3	U 409.014†	-2815.5	-17.5	-0.4447 ug/L	-0.4447 ppb	18:13:37
3	V 292.402†	-1449.8	18.6	0.1394 ug/L	0.1394 ppb	18:13:42
3	Zn 213.857†	915.0	-7.1	-0.0638 ug/L	-0.0638 ppb	18:14:02
3	SiO2†	425.8	27.5	1.7593 ug/L	1.7593 ppb	18:14:17

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	998578.2	100.66	%	0.648				0.64%
Sc Radial	5582.0	106	%	1.9				1.75%
Y 371.029	866907.9	100.81	%	0.489				0.49%
Y RADIAL	5881.4	106.5	%	1.69				1.59%
Ag 328.068†	21.3	0.0843	ug/L	0.29498	0.0843	ppb	0.29498	349.91%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.4	-2.8001	ug/L	1.75021	-2.8001	ppb	1.75021	62.50%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.2	1.7060	ug/L	1.20568	1.7060	ppb	1.20568	70.67%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	262.3	6.0256	ug/L	0.28548	6.0256	ppb	0.28548	4.74%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.5	0.0116	ug/L	0.02227	0.0116	ppb	0.02227	191.97%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	176.9	0.0647	ug/L	0.01815	0.0647	ppb	0.01815	28.07%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.9	-3.1853	ug/L	2.77812	-3.1853	ppb	2.77812	87.22%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                2.8      0.0341 ug/L       0.10808      0.0341 ppb        0.10808 317.27%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                1.8      0.0391 ug/L       0.09741      0.0391 ppb        0.09741 249.17%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -10.6     -0.1125 ug/L       0.19493     -0.1125 ppb        0.19493 173.27%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               13.3      0.0367 ug/L       0.52172      0.0367 ppb        0.52172 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -2.2    -20.816 ug/L       20.5845    -20.816 ppb        20.5845  98.89%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -143.5    -25.914 ug/L       11.8066    -25.914 ppb        11.8066  45.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.1     41.840 ug/L       85.3468     41.840 ppb        85.3468 203.99%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -48.5     -0.0582 ug/L       0.01015     -0.0582 ppb        0.01015  17.44%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                8.6      0.5858 ug/L       0.52366      0.5858 ppb        0.52366  89.39%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        25.5      7.7608 ug/L      15.12594      7.7608 ppb       15.12594 194.90%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -0.3     -0.0082 ug/L       0.07252     -0.0082 ppb        0.07252 879.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -2.9     -1.5811 ug/L       1.63417     -1.5811 ppb        1.63417 103.35%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               10.6      1.2821 ug/L       0.99378      1.2821 ppb        0.99378  77.51%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.7      3.6142 ug/L       6.17835      3.6142 ppb        6.17835 170.95%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                4.0      1.3027 ug/L       2.80458      1.3027 ppb        2.80458 215.29%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.3      0.0754 ug/L       1.74221      0.0754 ppb        1.74221 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               -5.8     -0.1845 ug/L       0.47296     -0.1845 ppb        0.47296 256.33%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                6.0      1.0945 ug/L       0.26650      1.0945 ppb        0.26650  24.35%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -11.4     -0.0704 ug/L       0.11496     -0.0704 ppb        0.11496 163.24%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               42.8      0.0613 ug/L       0.06752      0.0613 ppb        0.06752 110.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                7.6      2.4501 ug/L       1.63746      2.4501 ppb        1.63746  66.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -11.9     -0.3007 ug/L       3.75609     -0.3007 ppb        3.75609 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 7.7      0.0617 ug/L       0.08697      0.0617 ppb        0.08697 140.90%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -5.2     -0.0452 ug/L       0.03303     -0.0452 ppb        0.03303  73.03%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     26.1      1.6850 ug/L       1.42455      1.6850 ppb        1.42455  84.54%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 1/29/2010 18:16:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5647.2	5647.2	107	%			18:18:21
1	Y RADIAL	5933.0	5933.0	107.4	%			18:18:21
1	Al 396.153Radial†	153.3	250.1	201.52	ug/L	201.52	ppb	18:18:41
1	Ca 317.933Radial†	152.1	121.3	201.99	ug/L	201.99	ppb	18:18:41
1	Fe 238.204 Radial†	23.3	11.7	112.17	ug/L	112.17	ppb	18:18:41
1	K 766.490 Radial†	3473.0	582.7	105.01	ug/L	105.01	ppb	18:18:21
1	Mg 279.077 IEC†	10.8	8.7	331.60	ug/L	331.60	ppb	18:18:41
1	Na 589.592 Radial†	513.6	1067.3	325.05	ug/L	325.05	ppb	18:18:21
1	Sr 421.552†	935.0	806.6	4.9666	ug/L	4.9666	ppb	18:18:21
1	Sc 361.383	988544.5	988544.5	99.653	%			18:19:38
1	Y 371.029	858225.3	858225.3	99.798	%			18:19:38
1	Ag 328.068†	1723.3	1354.8	5.7578	ug/L	5.7578	ppb	18:19:43
1	As 188.979†	34.1	70.7	29.114	ug/L	29.114	ppb	18:20:03
1	B 249.677†	2006.8	2354.9	54.034	ug/L	54.034	ppb	18:19:43
1	Ba 233.527†	649.6	668.2	5.4327	ug/L	5.4327	ppb	18:20:03
1	Be 313.107†	9609.6	14445.5	5.2827	ug/L	5.2827	ppb	18:19:43
1	Cd 226.502†	286.5	471.1	5.2926	ug/L	5.2926	ppb	18:20:03
1	Co 228.616†	171.7	241.4	5.1130	ug/L	5.1130	ppb	18:20:03
1	Cr 267.716†	527.3	459.8	4.8531	ug/L	4.8531	ppb	18:20:03
1	Cu 324.752†	12817.0	3891.5	10.964	ug/L	10.964	ppb	18:19:43
1	Mn 257.610†	10225.8	9691.2	10.889	ug/L	10.889	ppb	18:19:43
1	Mo 202.031†	156.6	146.5	10.073	ug/L	10.073	ppb	18:20:03
1	Ni 231.604†	319.0	239.7	5.7985	ug/L	5.7985	ppb	18:20:03
1	P 214.914†	517.7	270.9	147.59	ug/L	147.59	ppb	18:20:03
1	Pb 220.353†	34.8	80.1	9.6801	ug/L	9.6801	ppb	18:20:03
1	S 181.975 Axial†	118.3	76.0	102.03	ug/L	102.03	ppb	18:20:03
1	Sb 206.836†	65.0	30.4	10.128	ug/L	10.128	ppb	18:20:03
1	Se 196.026†	46.8	70.7	39.122	ug/L	39.122	ppb	18:20:03
1	Si 251.611†	3691.7	3300.9	100.71	ug/L	100.71	ppb	18:20:03
1	Sn 189.927†	59.4	58.5	10.644	ug/L	10.644	ppb	18:20:03
1	Ti 334.940†	2469.1	3492.4	5.2721	ug/L	5.2721	ppb	18:19:43
1	Tl 190.801†	20.8	65.9	21.385	ug/L	21.385	ppb	18:20:03
1	U 409.014†	-718.5	2072.9	52.894	ug/L	52.894	ppb	18:19:43
1	V 292.402†	-778.4	685.1	4.6840	ug/L	4.6840	ppb	18:19:43
1	Zn 213.857†	1887.6	973.4	8.8228	ug/L	8.8228	ppb	18:20:03
1	SiO2†	3829.0	3444.7	224.39	ug/L	224.39	ppb	18:21:09
2	Sc Radial	5619.5	5619.5	107	%			18:18:46
2	Y RADIAL	5908.7	5908.7	107.0	%			18:18:46
2	Al 396.153Radial†	161.8	258.8	208.54	ug/L	208.54	ppb	18:19:06
2	Ca 317.933Radial†	156.6	126.3	210.18	ug/L	210.18	ppb	18:19:06
2	Fe 238.204 Radial†	21.3	9.9	95.269	ug/L	95.269	ppb	18:19:06
2	K 766.490 Radial†	3578.2	697.4	125.73	ug/L	125.73	ppb	18:18:46
2	Mg 279.077 IEC†	14.2	12.0	456.70	ug/L	456.70	ppb	18:19:06
2	Na 589.592 Radial†	500.5	1057.4	322.02	ug/L	322.02	ppb	18:18:46
2	Sr 421.552†	941.3	816.9	5.0297	ug/L	5.0297	ppb	18:18:46
2	Sc 361.383	995924.8	995924.8	100.40	%			18:20:08
2	Y 371.029	864290.4	864290.4	100.50	%			18:20:08
2	Ag 328.068†	1612.4	1231.5	5.2335	ug/L	5.2335	ppb	18:20:13
2	As 188.979†	39.0	75.3	31.005	ug/L	31.005	ppb	18:20:34
2	B 249.677†	2013.7	2346.9	53.853	ug/L	53.853	ppb	18:20:13
2	Ba 233.527†	624.3	638.2	5.1909	ug/L	5.1909	ppb	18:20:34
2	Be 313.107†	9556.6	14321.3	5.2371	ug/L	5.2371	ppb	18:20:13
2	Cd 226.502†	313.9	496.2	5.5764	ug/L	5.5764	ppb	18:20:34
2	Co 228.616†	178.0	246.3	5.2177	ug/L	5.2177	ppb	18:20:34
2	Cr 267.716†	546.0	474.5	5.0096	ug/L	5.0096	ppb	18:20:34
2	Cu 324.752†	12707.0	3686.7	10.385	ug/L	10.385	ppb	18:20:13
2	Mn 257.610†	10055.1	9445.2	10.606	ug/L	10.606	ppb	18:20:13
2	Mo 202.031†	158.3	147.1	10.112	ug/L	10.112	ppb	18:20:34
2	Ni 231.604†	327.1	245.4	5.9364	ug/L	5.9364	ppb	18:20:34

2	P 214.914†	512.6	261.9	142.77 ug/L	142.77 ppb	18:20:34
2	Pb 220.353†	46.9	91.8	11.100 ug/L	11.100 ppb	18:20:34
2	S 181.975 Axial†	124.2	81.0	108.75 ug/L	108.75 ppb	18:20:34
2	Sb 206.836†	61.7	26.6	8.9330 ug/L	8.9330 ppb	18:20:34
2	Se 196.026†	46.7	70.2	38.811 ug/L	38.811 ppb	18:20:34
2	Si 251.611†	3705.1	3286.8	100.28 ug/L	100.28 ppb	18:20:34
2	Sn 189.927†	64.0	62.6	11.397 ug/L	11.397 ppb	18:20:34
2	Ti 334.940†	2387.9	3393.2	5.1127 ug/L	5.1127 ppb	18:20:13
2	Tl 190.801†	23.0	67.9	22.048 ug/L	22.048 ppb	18:20:34
2	U 409.014†	-747.7	2049.0	52.288 ug/L	52.288 ppb	18:20:13
2	V 292.402†	-637.3	831.5	5.6407 ug/L	5.6407 ppb	18:20:13
2	Zn 213.857†	1874.0	945.8	8.5720 ug/L	8.5720 ppb	18:20:34
2	SiO2†	3803.0	3390.3	220.84 ug/L	220.84 ppb	18:21:14
3	Sc Radial	5516.6	5516.6	105 %		18:19:12
3	Y RADIAL	5802.3	5802.3	105.1 %		18:19:12
3	Al 396.153Radial†	156.7	256.8	206.96 ug/L	206.96 ppb	18:19:32
3	Ca 317.933Radial†	159.4	131.7	219.31 ug/L	219.31 ppb	18:19:32
3	Fe 238.204 Radial†	20.8	9.8	94.339 ug/L	94.339 ppb	18:19:32
3	K 766.490 Radial†	3612.5	792.9	142.98 ug/L	142.98 ppb	18:19:12
3	Mg 279.077 IEC†	11.3	9.5	362.26 ug/L	362.26 ppb	18:19:32
3	Na 589.592 Radial†	379.7	950.7	289.52 ug/L	289.52 ppb	18:19:12
3	Sr 421.552†	932.9	825.3	5.0814 ug/L	5.0814 ppb	18:19:12
3	Sc 361.383	997876.9	997876.9	100.59 %		18:20:39
3	Y 371.029	867296.1	867296.1	100.85 %		18:20:39
3	Ag 328.068†	1679.0	1294.6	5.5057 ug/L	5.5057 ppb	18:20:44
3	As 188.979†	37.1	73.4	30.224 ug/L	30.224 ppb	18:21:04
3	B 249.677†	1995.2	2324.6	53.342 ug/L	53.342 ppb	18:20:44
3	Ba 233.527†	639.0	651.6	5.2991 ug/L	5.2991 ppb	18:21:04
3	Be 313.107†	9764.8	14509.7	5.3059 ug/L	5.3059 ppb	18:20:44
3	Cd 226.502†	291.6	473.5	5.3196 ug/L	5.3196 ppb	18:21:04
3	Co 228.616†	175.4	243.4	5.1539 ug/L	5.1539 ppb	18:21:04
3	Cr 267.716†	547.4	474.9	5.0166 ug/L	5.0166 ppb	18:21:04
3	Cu 324.752†	12738.8	3693.5	10.408 ug/L	10.408 ppb	18:20:44
3	Mn 257.610†	10198.9	9568.6	10.748 ug/L	10.748 ppb	18:20:44
3	Mo 202.031†	148.1	136.7	9.3946 ug/L	9.3946 ppb	18:21:04
3	Ni 231.604†	319.2	236.9	5.7302 ug/L	5.7302 ppb	18:21:04
3	P 214.914†	520.2	268.5	146.40 ug/L	146.40 ppb	18:21:04
3	Pb 220.353†	52.5	97.3	11.754 ug/L	11.754 ppb	18:21:04
3	S 181.975 Axial†	117.2	73.8	99.032 ug/L	99.032 ppb	18:21:04
3	Sb 206.836†	57.6	22.4	7.5422 ug/L	7.5422 ppb	18:21:04
3	Se 196.026†	41.1	64.6	35.740 ug/L	35.740 ppb	18:21:04
3	Si 251.611†	3708.4	3282.8	100.17 ug/L	100.17 ppb	18:21:04
3	Sn 189.927†	56.2	54.7	9.9610 ug/L	9.9610 ppb	18:21:04
3	Ti 334.940†	2422.7	3423.1	5.1702 ug/L	5.1702 ppb	18:20:44
3	Tl 190.801†	23.0	67.9	22.041 ug/L	22.041 ppb	18:21:04
3	U 409.014†	-1034.8	1765.1	45.039 ug/L	45.039 ppb	18:20:44
3	V 292.402†	-669.4	800.7	5.4150 ug/L	5.4150 ppb	18:20:44
3	Zn 213.857†	1915.9	983.8	8.9208 ug/L	8.9208 ppb	18:21:04
3	SiO2†	3864.0	3443.5	224.33 ug/L	224.33 ppb	18:21:19

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	994115.4	100.21	%	0.496				0.50%
Sc Radial	5594.4	106	%	1.3				1.23%
Y 371.029	863270.6	100.39	%	0.537				0.54%
Y RADIAL	5881.3	106.5	%	1.26				1.18%
Ag 328.068†	1293.6	5.4990	ug/L	0.26222	5.4990	ppb	0.26222	4.77%
QC value within limits for Ag 328.068 Recovery = 109.98%								
Al 396.153Radial†	255.2	205.67	ug/L	3.680	205.67	ppb	3.680	1.79%
QC value within limits for Al 396.153Radial Recovery = 102.84%								
As 188.979†	73.1	30.114	ug/L	0.9504	30.114	ppb	0.9504	3.16%
QC value within limits for As 188.979 Recovery = 100.38%								
B 249.677†	2342.1	53.743	ug/L	0.3592	53.743	ppb	0.3592	0.67%
QC value within limits for B 249.677 Recovery = 107.49%								
Ba 233.527†	652.7	5.3076	ug/L	0.12109	5.3076	ppb	0.12109	2.28%
QC value within limits for Ba 233.527 Recovery = 106.15%								
Be 313.107†	14425.5	5.2752	ug/L	0.03502	5.2752	ppb	0.03502	0.66%
QC value within limits for Be 313.107 Recovery = 105.50%								
Ca 317.933Radial†	126.4	210.49	ug/L	8.667	210.49	ppb	8.667	4.12%

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   QC value within limits for Ca 317.933Radial  Recovery = 105.25%
Cd 226.502†              480.3      5.3962 ug/L       0.15663      5.3962 ppb        0.15663   2.90%
   QC value within limits for Cd 226.502  Recovery = 107.92%
Co 228.616†              243.7      5.1615 ug/L       0.05277      5.1615 ppb        0.05277   1.02%
   QC value within limits for Co 228.616  Recovery = 103.23%
Cr 267.716†              469.8      4.9598 ug/L       0.09248      4.9598 ppb        0.09248   1.86%
   QC value within limits for Cr 267.716  Recovery = 99.20%
Cu 324.752†             3757.2      10.585 ug/L        0.3277      10.585 ppb         0.3277   3.10%
   QC value within limits for Cu 324.752  Recovery = 105.85%
Fe 238.204 Radial†        10.5      100.59 ug/L        10.038      100.59 ppb         10.038   9.98%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.59%
K 766.490 Radial†        691.0      124.57 ug/L        19.014      124.57 ppb         19.014  15.26%
   QC value within limits for K 766.490 Radial  Recovery = 83.05%
Mg 279.077 IEC†           10.0      383.52 ug/L        65.205      383.52 ppb         65.205  17.00%
   QC value within limits for Mg 279.077 IEC  Recovery = 127.84%
Mn 257.610†             9568.3      10.748 ug/L        0.1416      10.748 ppb         0.1416   1.32%
   QC value within limits for Mn 257.610  Recovery = 107.48%
Mo 202.031†              143.4      9.8602 ug/L       0.40363      9.8602 ppb        0.40363   4.09%
   QC value within limits for Mo 202.031  Recovery = 98.60%
Na 589.592 Radial†      1025.1      312.20 ug/L        19.701      312.20 ppb         19.701   6.31%
   QC value within limits for Na 589.592 Radial  Recovery = 104.07%
Ni 231.604†              240.6      5.8217 ug/L       0.10508      5.8217 ppb        0.10508   1.80%
   QC value within limits for Ni 231.604  Recovery = 116.43%
P 214.914†               267.1      145.59 ug/L         2.509      145.59 ppb          2.509   1.72%
   QC value within limits for P 214.914  Recovery = 97.06%
Pb 220.353†               89.7      10.845 ug/L        1.0604      10.845 ppb         1.0604   9.78%
   QC value within limits for Pb 220.353  Recovery = 108.45%
S 181.975 Axial†          76.9      103.27 ug/L         4.977      103.27 ppb          4.977   4.82%
   QC value within limits for S 181.975 Axial  Recovery = 103.27%
Sb 206.836†               26.5      8.8678 ug/L       1.29414      8.8678 ppb        1.29414  14.59%
   QC value within limits for Sb 206.836  Recovery = 88.68%
Se 196.026†               68.5      37.891 ug/L        1.8695      37.891 ppb         1.8695   4.93%
   QC value within limits for Se 196.026  Recovery = 126.30%
Si 251.611†             3290.2      100.38 ug/L         0.287      100.38 ppb          0.287   0.29%
   QC value within limits for Si 251.611  Recovery = 100.38%
Sn 189.927†               58.6      10.667 ug/L        0.7185      10.667 ppb         0.7185   6.74%
   QC value within limits for Sn 189.927  Recovery = 106.67%
Sr 421.552†              816.2      5.0259 ug/L       0.05746      5.0259 ppb        0.05746   1.14%
   QC value within limits for Sr 421.552  Recovery = 100.52%
Ti 334.940†             3436.2      5.1850 ug/L       0.08073      5.1850 ppb        0.08073   1.56%
   QC value within limits for Ti 334.940  Recovery = 103.70%
Tl 190.801†               67.2      21.825 ug/L        0.3803      21.825 ppb         0.3803   1.74%
   QC value within limits for Tl 190.801  Recovery = 109.12%
U 409.014†              1962.3      50.074 ug/L        4.3706      50.074 ppb         4.3706   8.73%
   QC value within limits for U 409.014  Recovery = 100.15%
V 292.402†               772.4      5.2466 ug/L       0.50009      5.2466 ppb        0.50009   9.53%
   QC value within limits for V 292.402  Recovery = 104.93%
Zn 213.857†              967.7      8.7718 ug/L       0.17992      8.7718 ppb        0.17992   2.05%
   QC value within limits for Zn 213.857  Recovery = 87.72%
SiO2†                   3426.1      223.19 ug/L         2.031      223.19 ppb          2.031   0.91%
   QC value within limits for SiO2  Recovery = 104.78%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 1/29/2010 18:23:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4994.8	4994.8	94.7	%			18:25:29
1	Y RADIAL	5230.5	5230.5	94.70	%			18:25:29
1	Al 396.153Radial†	598388.5	632024.0	510550	ug/L	510550	ppb	18:25:24
1	Ca 317.933Radial†	269267.3	284334.1	473320	ug/L	473320	ppb	18:25:24
1	Fe 238.204 Radial†	18348.0	19366.0	185700	ug/L	185700	ppb	18:25:29
1	K 766.490 Radial†	2519.6	-0.4	-158.41	ug/L	-158.41	ppb	18:25:29
1	Mg 279.077 IEC†	12057.2	12731.4	485900	ug/L	485900	ppb	18:25:29
1	Na 589.592 Radial†	-282.3	289.5	88.179	ug/L	88.179	ppb	18:25:29
1	Sr 421.552†	652.7	622.5	0.3000	ug/L	0.3000	ppb	18:25:29
1	Sc 361.383	838820.8	838820.8	84.560	%			18:25:56
1	Y 371.029	711040.1	711040.1	82.683	%			18:25:56
1	Ag 328.068†	-10106.3	-12326.1	1.4335	ug/L	1.4335	ppb	18:25:56
1	As 188.979†	-95.8	-76.8	11.752	ug/L	11.752	ppb	18:26:16
1	B 249.677†	746.1	1223.4	-2.0710	ug/L	-2.0710	ppb	18:25:56
1	Ba 233.527†	-616.0	-712.1	-0.0862	ug/L	-0.0862	ppb	18:26:16
1	Be 313.107†	-4976.2	-1082.4	-0.4564	ug/L	-0.4564	ppb	18:25:56
1	Cd 226.502†	1429.8	1874.4	1.8772	ug/L	1.8772	ppb	18:26:16
1	Co 228.616†	-9.6	57.7	-1.4545	ug/L	-1.4545	ppb	18:26:16
1	Cr 267.716†	-212.0	-320.0	0.2332	ug/L	0.2332	ppb	18:26:16
1	Cu 324.752†	6263.4	-1563.0	5.3944	ug/L	5.3944	ppb	18:25:56
1	Mn 257.610†	24.7	-541.0	-2.1426	ug/L	-2.1426	ppb	18:25:56
1	Mo 202.031†	-244.7	-300.0	-0.5538	ug/L	-0.5538	ppb	18:26:16
1	Ni 231.604†	181.6	134.3	3.2496	ug/L	3.2496	ppb	18:26:16
1	P 214.914†	211.1	1.0	-21.529	ug/L	-21.529	ppb	18:26:16
1	Pb 220.353†	-685.7	-765.8	8.1430	ug/L	8.1430	ppb	18:26:16
1	S 181.975 Axial†	85.8	58.7	-16.857	ug/L	-16.857	ppb	18:26:16
1	Sb 206.836†	74.6	53.3	6.5962	ug/L	6.5962	ppb	18:26:16
1	Se 196.026†	-933.5	-1080.2	54.638	ug/L	54.638	ppb	18:26:16
1	Si 251.611†	403.8	73.8	2.5091	ug/L	2.5091	ppb	18:26:16
1	Sn 189.927†	-346.3	-410.7	0.5574	ug/L	0.5574	ppb	18:26:16
1	Ti 334.940†	-15956.0	-17854.8	-3.3170	ug/L	-3.3170	ppb	18:25:56
1	Tl 190.801†	-92.0	-63.8	-20.900	ug/L	-20.900	ppb	18:26:16
1	U 409.014†	-1064.6	1534.8	18.020	ug/L	18.020	ppb	18:25:56
1	V 292.402†	1082.9	2746.8	0.0295	ug/L	0.0295	ppb	18:26:16
1	Zn 213.857†	3287.2	2966.7	9.0524	ug/L	9.0524	ppb	18:26:16
1	SiO2†	397.9	72.9	5.3143	ug/L	5.3143	ppb	18:27:13
2	Sc Radial	5000.7	5000.7	94.8	%			18:25:39
2	Y RADIAL	5248.9	5248.9	95.04	%			18:25:39
2	Al 396.153Radial†	598492.8	631382.7	510040	ug/L	510040	ppb	18:25:34
2	Ca 317.933Radial†	269266.0	283994.6	472750	ug/L	472750	ppb	18:25:34
2	Fe 238.204 Radial†	18406.7	19404.8	186070	ug/L	186070	ppb	18:25:39
2	K 766.490 Radial†	2463.2	-63.1	-169.54	ug/L	-169.54	ppb	18:25:39
2	Mg 279.077 IEC†	12107.5	12769.4	487350	ug/L	487350	ppb	18:25:39
2	Na 589.592 Radial†	-295.3	276.1	84.098	ug/L	84.098	ppb	18:25:39
2	Sr 421.552†	642.1	610.6	0.2308	ug/L	0.2308	ppb	18:25:39
2	Sc 361.383	842642.2	842642.2	84.945	%			18:26:22
2	Y 371.029	713407.4	713407.4	82.958	%			18:26:22
2	Ag 328.068†	-10282.5	-12479.4	0.9103	ug/L	0.9103	ppb	18:26:22
2	As 188.979†	-103.6	-85.4	8.2815	ug/L	8.2815	ppb	18:26:42
2	B 249.677†	691.7	1155.4	-3.6912	ug/L	-3.6912	ppb	18:26:22
2	Ba 233.527†	-626.6	-721.2	-0.1489	ug/L	-0.1489	ppb	18:26:42
2	Be 313.107†	-4998.8	-1082.3	-0.4564	ug/L	-0.4564	ppb	18:26:22
2	Cd 226.502†	1399.3	1830.8	1.3503	ug/L	1.3503	ppb	18:26:42
2	Co 228.616†	-28.4	35.6	-1.9334	ug/L	-1.9334	ppb	18:26:42
2	Cr 267.716†	-191.6	-294.8	0.5061	ug/L	0.5061	ppb	18:26:42
2	Cu 324.752†	6284.2	-1572.1	5.3875	ug/L	5.3875	ppb	18:26:22
2	Mn 257.610†	168.9	-371.3	-1.9744	ug/L	-1.9744	ppb	18:26:22
2	Mo 202.031†	-277.6	-337.4	-3.1039	ug/L	-3.1039	ppb	18:26:42
2	Ni 231.604†	182.4	134.2	3.2489	ug/L	3.2489	ppb	18:26:42

2	P 214.914†	191.6	-23.1	-35.287	ug/L	-35.287 ppb	18:26:42
2	Pb 220.353†	-699.0	-777.8	6.5424	ug/L	6.5424 ppb	18:26:42
2	S 181.975 Axial†	67.8	37.1	-45.732	ug/L	-45.732 ppb	18:26:42
2	Sb 206.836†	75.7	54.3	6.8215	ug/L	6.8215 ppb	18:26:42
2	Se 196.026†	-948.5	-1092.8	48.909	ug/L	48.909 ppb	18:26:42
2	Si 251.611†	429.2	101.6	3.3897	ug/L	3.3897 ppb	18:26:42
2	Sn 189.927†	-359.1	-423.8	-1.9082	ug/L	-1.9082 ppb	18:26:42
2	Ti 334.940†	-16042.8	-17871.4	-3.5373	ug/L	-3.5373 ppb	18:26:22
2	Tl 190.801†	-79.5	-48.6	-15.995	ug/L	-15.995 ppb	18:26:42
2	U 409.014†	-1009.9	1604.9	19.767	ug/L	19.767 ppb	18:26:22
2	V 292.402†	1100.1	2761.3	0.0644	ug/L	0.0644 ppb	18:26:42
2	Zn 213.857†	3277.1	2937.1	8.7462	ug/L	8.7462 ppb	18:26:42
2	SiO2†	341.2	4.0	0.8944	ug/L	0.8944 ppb	18:27:18
3	Sc Radial	4999.0	4999.0	94.8	%		18:25:49
3	Y RADIAL	5243.7	5243.7	94.94	%		18:25:49
3	Al 396.153Radial†	594353.3	627233.3	506680	ug/L	506680 ppb	18:25:44
3	Ca 317.933Radial†	267220.4	281934.5	469320	ug/L	469320 ppb	18:25:44
3	Fe 238.204 Radial†	18461.6	19469.5	186690	ug/L	186690 ppb	18:25:49
3	K 766.490 Radial†	2428.1	-99.2	-174.92	ug/L	-174.92 ppb	18:25:49
3	Mg 279.077 IEC†	12167.3	12836.9	489930	ug/L	489930 ppb	18:25:49
3	Na 589.592 Radial†	-301.8	269.2	81.973	ug/L	81.973 ppb	18:25:49
3	Sr 421.552†	613.7	580.8	0.0727	ug/L	0.0727 ppb	18:25:49
3	Sc 361.383	835972.1	835972.1	84.273	%		18:26:47
3	Y 371.029	707018.3	707018.3	82.215	%		18:26:47
3	Ag 328.068†	-10188.3	-12464.2	1.2221	ug/L	1.2221 ppb	18:26:47
3	As 188.979†	-97.2	-78.8	11.146	ug/L	11.146 ppb	18:27:07
3	B 249.677†	701.8	1173.8	-3.3707	ug/L	-3.3707 ppb	18:26:47
3	Ba 233.527†	-601.4	-697.3	0.0635	ug/L	0.0635 ppb	18:27:07
3	Be 313.107†	-5082.6	-1228.7	-0.5099	ug/L	-0.5099 ppb	18:26:47
3	Cd 226.502†	1411.9	1859.0	1.6014	ug/L	1.6014 ppb	18:27:07
3	Co 228.616†	4.5	74.4	-1.1207	ug/L	-1.1207 ppb	18:27:07
3	Cr 267.716†	-179.8	-282.6	0.6474	ug/L	0.6474 ppb	18:27:07
3	Cu 324.752†	6187.5	-1627.9	5.2638	ug/L	5.2638 ppb	18:26:47
3	Mn 257.610†	72.4	-484.3	-2.1456	ug/L	-2.1456 ppb	18:26:47
3	Mo 202.031†	-270.5	-331.5	-2.6910	ug/L	-2.6910 ppb	18:27:07
3	Ni 231.604†	177.5	130.1	3.1489	ug/L	3.1489 ppb	18:27:07
3	P 214.914†	206.0	-4.2	-26.151	ug/L	-26.151 ppb	18:27:07
3	Pb 220.353†	-672.1	-752.4	8.7576	ug/L	8.7576 ppb	18:27:07
3	S 181.975 Axial†	76.7	48.2	-30.164	ug/L	-30.164 ppb	18:27:07
3	Sb 206.836†	53.8	29.0	-1.1222	ug/L	-1.1222 ppb	18:27:07
3	Se 196.026†	-938.0	-1089.4	52.638	ug/L	52.638 ppb	18:27:07
3	Si 251.611†	405.0	76.9	2.6298	ug/L	2.6298 ppb	18:27:07
3	Sn 189.927†	-341.5	-406.3	0.7547	ug/L	0.7547 ppb	18:27:07
3	Ti 334.940†	-15927.6	-17885.4	-4.2282	ug/L	-4.2282 ppb	18:26:47
3	Tl 190.801†	-104.9	-79.4	-25.968	ug/L	-25.968 ppb	18:27:07
3	U 409.014†	-1064.4	1530.8	17.804	ug/L	17.804 ppb	18:26:47
3	V 292.402†	1040.4	2700.8	-0.3675	ug/L	-0.3675 ppb	18:27:07
3	Zn 213.857†	3248.1	2933.5	8.6540	ug/L	8.6540 ppb	18:27:07
3	SiO2†	391.9	67.3	5.0107	ug/L	5.0107 ppb	18:27:23

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	839145.0	84.592	%	0.3374				0.40%
Sc Radial	4998.2	94.8	%	0.06				0.06%
Y 371.029	710488.6	82.619	%	0.3756				0.45%
Y RADIAL	5241.0	94.89	%	0.172				0.18%
Ag 328.068†	-12423.3	1.1886	ug/L	0.26317	1.1886	ppb	0.26317	22.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	630213.3	509090	ug/L	2100.8	509090	ppb	2100.8	0.41%
QC value within limits for Al 396.153Radial Recovery = 101.82%								
As 188.979†	-80.4	10.393	ug/L	1.8537	10.393	ppb	1.8537	17.84%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1184.2	-3.0443	ug/L	0.85801	-3.0443	ppb	0.85801	28.18%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-710.2	-0.0572	ug/L	0.10910	-0.0572	ppb	0.10910	190.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1131.1	-0.4742	ug/L	0.03086	-0.4742	ppb	0.03086	6.51%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	283421.1	471800	ug/L	2161.6	471800	ppb	2161.6	0.46%

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   QC value within limits for Ca 317.933Radial  Recovery = 94.36%
Cd 226.502†            1854.7      1.6096 ug/L       0.26356      1.6096 ppb        0.26356  16.37%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              55.9     -1.5028 ug/L       0.40850     -1.5028 ppb        0.40850  27.18%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -299.1      0.4622 ug/L       0.21053      0.4622 ppb        0.21053  45.55%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -1587.7      5.3485 ug/L       0.07350      5.3485 ppb        0.07350   1.37%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    19413.4      186150 ug/L         501.4      186150 ppb          501.4   0.27%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.08%
K 766.490 Radial†       -54.2     -167.62 ug/L         8.420     -167.62 ppb          8.420   5.02%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       12779.2      487730 ug/L        2039.3      487730 ppb         2039.3   0.42%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.55%
Mn 257.610†            -465.5     -2.0875 ug/L       0.09795     -2.0875 ppb        0.09795   4.69%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -323.0     -2.1162 ug/L       1.36874     -2.1162 ppb        1.36874  64.68%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      278.3      84.750 ug/L        3.1542      84.750 ppb         3.1542   3.72%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             132.9      3.2158 ug/L       0.05795      3.2158 ppb        0.05795   1.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -8.8     -27.656 ug/L        7.0010     -27.656 ppb         7.0010  25.31%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -765.3      7.8143 ug/L       1.14359      7.8143 ppb        1.14359  14.63%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         48.0     -30.918 ug/L       14.4524     -30.918 ppb        14.4524  46.74%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              45.5      4.0985 ug/L       4.52267      4.0985 ppb        4.52267 110.35%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†           -1087.5      52.062 ug/L        2.9077      52.062 ppb         2.9077   5.59%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              84.1      2.8428 ug/L       0.47739      2.8428 ppb        0.47739  16.79%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -413.6     -0.1987 ug/L       1.48374     -0.1987 ppb        1.48374 746.70%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             604.6      0.2012 ug/L       0.11653      0.2012 ppb        0.11653  57.93%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -17870.5     -3.6942 ug/L       0.47539     -3.6942 ppb        0.47539  12.87%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -63.9     -20.954 ug/L        4.9864     -20.954 ppb         4.9864  23.80%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1556.8      18.530 ug/L        1.0765      18.530 ppb         1.0765   5.81%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2736.3     -0.0912 ug/L       0.23991     -0.0912 ppb        0.23991 263.09%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            2945.7      8.8175 ug/L       0.20855      8.8175 ppb        0.20855   2.37%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    48.1      3.7398 ug/L       2.46889      3.7398 ppb        2.46889  66.02%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 1/29/2010 18:29:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4847.1	4847.1	91.9	%			18:31:32
1	Y RADIAL	5106.3	5106.3	92.45	%			18:31:32
1	Al 396.153Radial†	606454.0	660048.4	533170	ug/L	533170	ppb	18:31:27
1	Ca 317.933Radial†	271884.2	295842.9	492470	ug/L	492470	ppb	18:31:27
1	Fe 238.204 Radial†	18401.3	20014.2	191920	ug/L	191920	ppb	18:31:32
1	K 766.490 Radial†	31283.4	31381.3	5499.0	ug/L	5499.0	ppb	18:31:27
1	Mg 279.077 IEC†	12130.4	13198.9	503750	ug/L	503750	ppb	18:31:32
1	Na 589.592 Radial†	16887.5	18964.5	5775.6	ug/L	5775.6	ppb	18:31:32
1	Sr 421.552†	78878.1	85768.2	524.60	ug/L	524.60	ppb	18:31:27
1	Sc 361.383	851376.2	851376.2	85.825	%			18:32:00
1	Y 371.029	719699.0	719699.0	83.690	%			18:32:00
1	Ag 328.068†	44536.5	51517.4	275.75	ug/L	275.75	ppb	18:32:00
1	As 188.979†	945.2	1137.8	515.76	ug/L	515.76	ppb	18:32:20
1	B 249.677†	20206.1	23884.3	515.92	ug/L	515.92	ppb	18:32:00
1	Ba 233.527†	52211.9	60851.4	500.51	ug/L	500.51	ppb	18:32:00
1	Be 313.107†	573653.4	673197.9	246.74	ug/L	246.74	ppb	18:32:00
1	Cd 226.502†	36178.6	42337.2	455.99	ug/L	455.99	ppb	18:32:20
1	Co 228.616†	18382.3	21487.3	451.48	ug/L	451.48	ppb	18:32:20
1	Cr 267.716†	38660.8	44976.6	480.15	ug/L	480.15	ppb	18:32:00
1	Cu 324.752†	179777.7	200498.9	575.94	ug/L	575.94	ppb	18:32:00
1	Mn 257.610†	375769.2	437259.4	489.77	ug/L	489.77	ppb	18:32:00
1	Mo 202.031†	5859.3	6816.5	488.86	ug/L	488.86	ppb	18:32:20
1	Ni 231.604†	15856.0	18394.3	444.95	ug/L	444.95	ppb	18:32:20
1	P 214.914†	4196.8	4641.2	2435.1	ug/L	2435.1	ppb	18:32:20
1	Pb 220.353†	2646.8	3129.1	481.91	ug/L	481.91	ppb	18:32:20
1	S 181.975 Axial†	1780.6	2031.9	2628.9	ug/L	2628.9	ppb	18:32:20
1	Sb 206.836†	1536.8	1755.7	570.47	ug/L	570.47	ppb	18:32:20
1	Se 196.026†	3083.7	3616.7	2651.3	ug/L	2651.3	ppb	18:32:20
1	Si 251.611†	150162.7	174559.3	5326.6	ug/L	5326.6	ppb	18:32:00
1	Sn 189.927†	1956.2	2278.1	491.30	ug/L	491.30	ppb	18:32:20
1	Ti 334.940†	275164.0	321623.5	512.32	ug/L	512.32	ppb	18:32:00
1	Tl 190.801†	1200.7	1444.1	470.75	ug/L	470.75	ppb	18:32:20
1	U 409.014†	14883.0	20134.8	491.08	ug/L	491.08	ppb	18:32:00
1	V 292.402†	66840.4	79345.6	504.97	ug/L	504.97	ppb	18:32:00
1	Zn 213.857†	50325.9	57716.7	504.63	ug/L	504.63	ppb	18:32:00
1	SiO2†	150604.7	175080.2	11406	ug/L	11406	ppb	18:33:18
2	Sc Radial	4950.8	4950.8	93.9	%			18:31:43
2	Y RADIAL	5186.5	5186.5	93.91	%			18:31:43
2	Al 396.153Radial†	601157.1	640589.8	517450	ug/L	517450	ppb	18:31:38
2	Ca 317.933Radial†	269627.8	287245.3	478160	ug/L	478160	ppb	18:31:38
2	Fe 238.204 Radial†	18189.8	19369.6	185740	ug/L	185740	ppb	18:31:43
2	K 766.490 Radial†	30996.2	30362.7	5319.9	ug/L	5319.9	ppb	18:31:38
2	Mg 279.077 IEC†	11992.8	12776.0	487610	ug/L	487610	ppb	18:31:43
2	Na 589.592 Radial†	16763.2	18447.4	5618.1	ug/L	5618.1	ppb	18:31:43
2	Sr 421.552†	78093.6	83135.6	508.49	ug/L	508.49	ppb	18:31:38
2	Sc 361.383	852495.4	852495.4	85.938	%			18:32:26
2	Y 371.029	721428.5	721428.5	83.891	%			18:32:26
2	Ag 328.068†	44726.1	51669.9	274.59	ug/L	274.59	ppb	18:32:26
2	As 188.979†	956.6	1149.6	519.18	ug/L	519.18	ppb	18:32:46
2	B 249.677†	20320.0	23986.0	519.25	ug/L	519.25	ppb	18:32:26
2	Ba 233.527†	52299.2	60873.0	500.50	ug/L	500.50	ppb	18:32:26
2	Be 313.107†	575816.5	674837.5	247.33	ug/L	247.33	ppb	18:32:26
2	Cd 226.502†	36259.0	42375.5	457.06	ug/L	457.06	ppb	18:32:46
2	Co 228.616†	18453.8	21542.4	452.73	ug/L	452.73	ppb	18:32:46
2	Cr 267.716†	38903.4	45199.8	482.39	ug/L	482.39	ppb	18:32:26
2	Cu 324.752†	180557.9	201131.7	577.40	ug/L	577.40	ppb	18:32:26
2	Mn 257.610†	376450.7	437477.7	490.06	ug/L	490.06	ppb	18:32:26
2	Mo 202.031†	5876.9	6827.9	489.00	ug/L	489.00	ppb	18:32:46
2	Ni 231.604†	15934.0	18460.8	446.56	ug/L	446.56	ppb	18:32:46

2	P 214.914†	4174.3	4608.7	2417.9 ug/L	2417.9 ppb	18:32:46
2	Pb 220.353†	2643.4	3121.1	477.91 ug/L	477.91 ppb	18:32:46
2	S 181.975 Axial†	1768.3	2014.9	2609.1 ug/L	2609.1 ppb	18:32:46
2	Sb 206.836†	1551.4	1770.4	575.54 ug/L	575.54 ppb	18:32:46
2	Se 196.026†	3087.7	3616.7	2629.9 ug/L	2629.9 ppb	18:32:46
2	Si 251.611†	150507.1	174730.3	5331.8 ug/L	5331.8 ppb	18:32:26
2	Sn 189.927†	1985.5	2309.2	494.66 ug/L	494.66 ppb	18:32:46
2	Ti 334.940†	275637.2	321753.3	511.91 ug/L	511.91 ppb	18:32:26
2	Tl 190.801†	1197.2	1438.1	468.82 ug/L	468.82 ppb	18:32:46
2	U 409.014†	15082.1	20343.7	497.11 ug/L	497.11 ppb	18:32:26
2	V 292.402†	67056.7	79495.1	506.55 ug/L	506.55 ppb	18:32:26
2	Zn 213.857†	50468.9	57806.1	506.04 ug/L	506.04 ppb	18:32:26
2	SiO2†	152141.2	176637.8	11508 ug/L	11508 ppb	18:33:23
3	Sc Radial	5034.1	5034.1	95.4 %		18:31:53
3	Y RADIAL	5251.3	5251.3	95.08 %		18:31:53
3	Al 396.153Radial†	605828.5	634882.0	512840 ug/L	512840 ppb	18:31:48
3	Ca 317.933Radial†	270434.9	283335.7	471650 ug/L	471650 ppb	18:31:48
3	Fe 238.204 Radial†	18312.0	19176.9	183900 ug/L	183900 ppb	18:31:53
3	K 766.490 Radial†	31302.2	30136.7	5281.2 ug/L	5281.2 ppb	18:31:48
3	Mg 279.077 IEC†	12059.2	12634.0	482190 ug/L	482190 ppb	18:31:53
3	Na 589.592 Radial†	16974.3	18373.0	5595.4 ug/L	5595.4 ppb	18:31:53
3	Sr 421.552†	78995.5	82703.2	505.87 ug/L	505.87 ppb	18:31:48
3	Sc 361.383	852782.2	852782.2	85.967 %		18:32:52
3	Y 371.029	721374.0	721374.0	83.885 %		18:32:52
3	Ag 328.068†	44710.0	51633.7	273.92 ug/L	273.92 ppb	18:32:52
3	As 188.979†	965.6	1159.7	522.88 ug/L	522.88 ppb	18:33:12
3	B 249.677†	20367.4	24033.2	520.64 ug/L	520.64 ppb	18:32:52
3	Ba 233.527†	52331.3	60890.0	500.58 ug/L	500.58 ppb	18:32:52
3	Be 313.107†	575514.5	674260.8	247.12 ug/L	247.12 ppb	18:32:52
3	Cd 226.502†	36190.6	42281.7	456.20 ug/L	456.20 ppb	18:33:12
3	Co 228.616†	18391.0	21462.2	451.06 ug/L	451.06 ppb	18:33:12
3	Cr 267.716†	38824.8	45093.1	481.23 ug/L	481.23 ppb	18:32:52
3	Cu 324.752†	180548.0	201049.6	577.07 ug/L	577.07 ppb	18:32:52
3	Mn 257.610†	376671.5	437587.2	490.23 ug/L	490.23 ppb	18:32:52
3	Mo 202.031†	5892.5	6843.7	489.86 ug/L	489.86 ppb	18:33:12
3	Ni 231.604†	15909.1	18425.6	445.71 ug/L	445.71 ppb	18:33:12
3	P 214.914†	4167.5	4599.1	2412.9 ug/L	2412.9 ppb	18:33:12
3	Pb 220.353†	2627.9	3102.0	474.69 ug/L	474.69 ppb	18:33:12
3	S 181.975 Axial†	1783.4	2031.7	2632.5 ug/L	2632.5 ppb	18:33:12
3	Sb 206.836†	1530.7	1745.7	567.70 ug/L	567.70 ppb	18:33:12
3	Se 196.026†	3096.2	3625.3	2628.2 ug/L	2628.2 ppb	18:33:12
3	Si 251.611†	150684.4	174877.6	5336.3 ug/L	5336.3 ppb	18:32:52
3	Sn 189.927†	1985.4	2308.3	493.48 ug/L	493.48 ppb	18:33:12
3	Ti 334.940†	275582.6	321581.9	511.22 ug/L	511.22 ppb	18:32:52
3	Tl 190.801†	1202.0	1443.3	470.50 ug/L	470.50 ppb	18:33:12
3	U 409.014†	15078.8	20334.0	497.07 ug/L	497.07 ppb	18:32:52
3	V 292.402†	66962.2	79359.0	505.85 ug/L	505.85 ppb	18:32:52
3	Zn 213.857†	50685.9	58038.8	508.35 ug/L	508.35 ppb	18:32:52
3	SiO2†	151036.3	175292.9	11420 ug/L	11420 ppb	18:33:28

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	852217.9	85.910	%	0.0749				0.09%
Sc Radial	4944.0	93.7	%	1.78				1.89%
Y 371.029	720833.8	83.822	%	0.1143				0.14%
Y RADIAL	5181.4	93.81	%	1.315				1.40%
Ag 328.068†	51607.0	274.76	ug/L	0.925	274.76	ppb	0.925	0.34%
QC value within limits for Ag 328.068 Recovery = 109.90%								
Al 396.153Radial†	645173.4	521150	ug/L	10658.6	521150	ppb	10658.6	2.05%
QC value within limits for Al 396.153Radial Recovery = 104.23%								
As 188.979†	1149.0	519.28	ug/L	3.560	519.28	ppb	3.560	0.69%
QC value within limits for As 188.979 Recovery = 103.86%								
B 249.677†	23967.8	518.61	ug/L	2.427	518.61	ppb	2.427	0.47%
QC value within limits for B 249.677 Recovery = 103.72%								
Ba 233.527†	60871.5	500.53	ug/L	0.043	500.53	ppb	0.043	0.01%
QC value within limits for Ba 233.527 Recovery = 100.11%								
Be 313.107†	674098.7	247.06	ug/L	0.304	247.06	ppb	0.304	0.12%
QC value within limits for Be 313.107 Recovery = 98.83%								
Ca 317.933Radial†	288808.0	480760	ug/L	10651.1	480760	ppb	10651.1	2.22%

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   QC value within limits for Ca 317.933Radial  Recovery = 96.15%
Cd 226.502†            42331.5      456.42 ug/L         0.568      456.42 ppb          0.568   0.12%
   QC value within limits for Cd 226.502  Recovery = 91.28%
Co 228.616†            21497.3      451.76 ug/L         0.867      451.76 ppb          0.867   0.19%
   QC value within limits for Co 228.616  Recovery = 90.35%
Cr 267.716†            45089.8      481.26 ug/L         1.120      481.26 ppb          1.120   0.23%
   QC value within limits for Cr 267.716  Recovery = 96.25%
Cu 324.752†           200893.4      576.80 ug/L         0.764      576.80 ppb          0.764   0.13%
   QC value within limits for Cu 324.752  Recovery = 115.36%
Fe 238.204 Radial†     19520.2      187190 ug/L        4204.7      187190 ppb         4204.7   2.25%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.59%
K 766.490 Radial†      30626.9      5366.7 ug/L        116.17      5366.7 ppb         116.17   2.16%
   QC value within limits for K 766.490 Radial  Recovery = 107.33%
Mg 279.077 IEC†        12869.7      491190 ug/L       11215.4      491190 ppb        11215.4   2.28%
   QC value within limits for Mg 279.077 IEC  Recovery = 98.24%
Mn 257.610†           437441.4      490.02 ug/L         0.232      490.02 ppb          0.232   0.05%
   QC value within limits for Mn 257.610  Recovery = 98.00%
Mo 202.031†             6829.4      489.24 ug/L         0.544      489.24 ppb          0.544   0.11%
   QC value within limits for Mo 202.031  Recovery = 97.85%
Na 589.592 Radial†     18595.0      5663.0 ug/L         98.12      5663.0 ppb          98.12   1.73%
   QC value within limits for Na 589.592 Radial  Recovery = 113.26%
Ni 231.604†            18426.9      445.74 ug/L         0.805      445.74 ppb          0.805   0.18%
   QC value within limits for Ni 231.604  Recovery = 89.15%
P 214.914†              4616.3      2422.0 ug/L         11.63      2422.0 ppb          11.63   0.48%
   QC value within limits for P 214.914  Recovery = 96.88%
Pb 220.353†             3117.4      478.17 ug/L         3.620      478.17 ppb          3.620   0.76%
   QC value within limits for Pb 220.353  Recovery = 95.63%
S 181.975 Axial†        2026.2      2623.5 ug/L         12.61      2623.5 ppb          12.61   0.48%
   QC value within limits for S 181.975 Axial  Recovery = 104.94%
Sb 206.836†             1757.3      571.24 ug/L         3.974      571.24 ppb          3.974   0.70%
   QC value within limits for Sb 206.836  Recovery = 114.25%
Se 196.026†             3619.5      2636.4 ug/L         12.88      2636.4 ppb          12.88   0.49%
   QC value within limits for Se 196.026  Recovery = 105.46%
Si 251.611†           174722.4      5331.5 ug/L          4.86      5331.5 ppb           4.86   0.09%
   QC value within limits for Si 251.611  Recovery = 106.63%
Sn 189.927†             2298.6      493.15 ug/L         1.707      493.15 ppb          1.707   0.35%
   QC value within limits for Sn 189.927  Recovery = 98.63%
Sr 421.552†            83869.0      512.99 ug/L        10.139      512.99 ppb         10.139   1.98%
   QC value within limits for Sr 421.552  Recovery = 102.60%
Ti 334.940†           321652.9      511.82 ug/L         0.554      511.82 ppb          0.554   0.11%
   QC value within limits for Ti 334.940  Recovery = 102.36%
Tl 190.801†             1441.8      470.02 ug/L         1.049      470.02 ppb          1.049   0.22%
   QC value within limits for Tl 190.801  Recovery = 94.00%
U 409.014†             20270.8      495.09 ug/L         3.473      495.09 ppb          3.473   0.70%
   QC value within limits for U 409.014  Recovery = 99.02%
V 292.402†             79399.9      505.79 ug/L         0.792      505.79 ppb          0.792   0.16%
   QC value within limits for V 292.402  Recovery = 101.16%
Zn 213.857†            57853.9      506.34 ug/L         1.875      506.34 ppb          1.875   0.37%
   QC value within limits for Zn 213.857  Recovery = 101.27%
SiO2†                 175670.3       11445 ug/L          55.1       11445 ppb           55.1   0.48%
   QC value within limits for SiO2  Recovery = 107.01%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 1/29/2010 18:35:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4939.9	4939.9	93.7	%			18:37:36
1	Y RADIAL	5192.3	5192.3	94.01	%			18:37:36
1	Al 396.153Radial†	590182.0	630277.1	509140	ug/L	509140	ppb	18:37:31
1	Ca 317.933Radial†	264740.1	282657.1	470520	ug/L	470520	ppb	18:37:31
1	Fe 238.204 Radial†	42877.3	45772.4	438900	ug/L	438900	ppb	18:37:36
1	K 766.490 Radial†	2596.5	111.3	-338.38	ug/L	-338.38	ppb	18:37:36
1	Mg 279.077 IEC†	11984.2	12794.8	488060	ug/L	488060	ppb	18:37:36
1	Na 589.592 Radial†	1585105.8	1693093.3	515620	ug/L	515620	ppb	18:37:31
1	Sr 421.552†	900.2	894.5	1.9960	ug/L	1.9960	ppb	18:37:36
1	Sc 361.383	838773.9	838773.9	84.555	%			18:38:04
1	Y 371.029	711365.4	711365.4	82.721	%			18:38:04
1	Ag 328.068†	-24406.5	-29239.2	0.3733	ug/L	0.3733	ppb	18:38:04
1	As 188.979†	-192.9	-191.7	23.951	ug/L	23.951	ppb	18:38:24
1	B 249.677†	1860.5	2541.4	-12.943	ug/L	-12.943	ppb	18:38:04
1	Ba 233.527†	-1684.4	-1975.6	-2.6011	ug/L	-2.6011	ppb	18:38:24
1	Be 313.107†	-11682.0	-9013.4	-3.3331	ug/L	-3.3331	ppb	18:38:04
1	Cd 226.502†	3699.7	4559.0	8.5855	ug/L	8.5855	ppb	18:38:24
1	Co 228.616†	194.7	299.4	-0.0755	ug/L	-0.0755	ppb	18:38:24
1	Cr 267.716†	-54.1	-133.3	1.6231	ug/L	1.6231	ppb	18:38:24
1	Cu 324.752†	3149.8	-5244.9	0.6862	ug/L	0.6862	ppb	18:38:04
1	Mn 257.610†	-24800.2	-29900.4	-10.230	ug/L	-10.230	ppb	18:38:04
1	Mo 202.031†	-506.8	-609.9	-2.2169	ug/L	-2.2169	ppb	18:38:24
1	Ni 231.604†	253.5	219.3	5.3054	ug/L	5.3054	ppb	18:38:24
1	P 214.914†	590.3	449.5	24.083	ug/L	24.083	ppb	18:38:24
1	Pb 220.353†	-464.4	-504.1	15.015	ug/L	15.015	ppb	18:38:24
1	S 181.975 Axial†	111.3	88.9	23.948	ug/L	23.948	ppb	18:38:24
1	Sb 206.836†	75.0	53.9	12.673	ug/L	12.673	ppb	18:38:24
1	Se 196.026†	-2325.7	-2726.8	-10.282	ug/L	-10.282	ppb	18:38:24
1	Si 251.611†	-497.6	-992.1	-29.790	ug/L	-29.790	ppb	18:38:24
1	Sn 189.927†	-368.9	-437.4	-0.4500	ug/L	-0.4500	ppb	18:38:24
1	Ti 334.940†	-11752.0	-12883.9	-2.4705	ug/L	-2.4705	ppb	18:38:04
1	Tl 190.801†	-111.4	-86.7	-28.471	ug/L	-28.471	ppb	18:38:24
1	U 409.014†	460528.9	547443.7	13926	ug/L	13926	ppb	18:38:04
1	V 292.402†	2811.3	4791.0	2.8624	ug/L	2.8624	ppb	18:38:24
1	Zn 213.857†	6291.0	6519.3	16.921	ug/L	16.921	ppb	18:38:24
1	SiO2†	-434.9	-912.0	-58.343	ug/L	-58.343	ppb	18:39:21
2	Sc Radial	4882.2	4882.2	92.6	%			18:37:46
2	Y RADIAL	5157.0	5157.0	93.37	%			18:37:46
2	Al 396.153Radial†	588536.4	635956.3	513730	ug/L	513730	ppb	18:37:41
2	Ca 317.933Radial†	263913.8	285109.3	474610	ug/L	474610	ppb	18:37:41
2	Fe 238.204 Radial†	42542.6	45952.6	440630	ug/L	440630	ppb	18:37:46
2	K 766.490 Radial†	2566.4	111.5	-341.37	ug/L	-341.37	ppb	18:37:46
2	Mg 279.077 IEC†	11961.0	12921.2	492880	ug/L	492880	ppb	18:37:46
2	Na 589.592 Radial†	1579592.1	1707164.4	519910	ug/L	519910	ppb	18:37:41
2	Sr 421.552†	868.4	871.5	1.8237	ug/L	1.8237	ppb	18:37:46
2	Sc 361.383	834873.4	834873.4	84.162	%			18:38:30
2	Y 371.029	707021.5	707021.5	82.216	%			18:38:30
2	Ag 328.068†	-24316.1	-29266.5	0.7943	ug/L	0.7943	ppb	18:38:30
2	As 188.979†	-197.1	-197.7	21.867	ug/L	21.867	ppb	18:38:50
2	B 249.677†	1979.9	2693.6	-9.7286	ug/L	-9.7286	ppb	18:38:30
2	Ba 233.527†	-1663.1	-1959.7	-2.4181	ug/L	-2.4181	ppb	18:38:50
2	Be 313.107†	-11681.3	-9077.1	-3.3562	ug/L	-3.3562	ppb	18:38:30
2	Cd 226.502†	3649.5	4519.9	7.9605	ug/L	7.9605	ppb	18:38:50
2	Co 228.616†	190.6	295.5	-0.1860	ug/L	-0.1860	ppb	18:38:50
2	Cr 267.716†	-48.0	-126.3	1.7468	ug/L	1.7468	ppb	18:38:50
2	Cu 324.752†	3111.8	-5272.7	0.7200	ug/L	0.7200	ppb	18:38:30
2	Mn 257.610†	-24230.8	-29360.9	-9.6497	ug/L	-9.6497	ppb	18:38:30
2	Mo 202.031†	-524.0	-633.2	-3.6316	ug/L	-3.6316	ppb	18:38:50
2	Ni 231.604†	263.9	233.1	5.6387	ug/L	5.6387	ppb	18:38:50

2	P 214.914†	596.0	459.5	29.326 ug/L	29.326 ppb	18:38:50
2	Pb 220.353†	-454.7	-495.1	16.986 ug/L	16.986 ppb	18:38:50
2	S 181.975 Axial†	78.0	49.9	-29.246 ug/L	-29.246 ppb	18:38:50
2	Sb 206.836†	77.7	57.4	13.624 ug/L	13.624 ppb	18:38:50
2	Se 196.026†	-2315.8	-2727.9	-4.8585 ug/L	-4.8585 ppb	18:38:50
2	Si 251.611†	-458.9	-948.9	-28.452 ug/L	-28.452 ppb	18:38:50
2	Sn 189.927†	-391.8	-466.6	-5.0996 ug/L	-5.0996 ppb	18:38:50
2	Ti 334.940†	-11660.5	-12840.2	-2.2342 ug/L	-2.2342 ppb	18:38:30
2	Tl 190.801†	-120.4	-98.0	-32.122 ug/L	-32.122 ppb	18:38:50
2	U 409.014†	457152.8	545976.8	13888 ug/L	13888 ppb	18:38:30
2	V 292.402†	2878.5	4886.4	3.2299 ug/L	3.2299 ppb	18:38:50
2	Zn 213.857†	6272.0	6531.6	16.863 ug/L	16.863 ppb	18:38:50
2	SiO2†	-569.9	-1074.9	-68.920 ug/L	-68.920 ppb	18:39:26
3	Sc Radial	4905.6	4905.6	93.0 %		18:37:57
3	Y RADIAL	5176.5	5176.5	93.72 %		18:37:57
3	Al 396.153Radial†	593596.5	638361.3	515670 ug/L	515670 ppb	18:37:52
3	Ca 317.933Radial†	265755.2	285728.0	475640 ug/L	475640 ppb	18:37:52
3	Fe 238.204 Radial†	42799.0	46008.8	441170 ug/L	441170 ppb	18:37:57
3	K 766.490 Radial†	2627.6	164.1	-332.17 ug/L	-332.17 ppb	18:37:57
3	Mg 279.077 IEC†	11993.3	12894.2	491850 ug/L	491850 ppb	18:37:57
3	Na 589.592 Radial†	1586839.4	1706809.3	519800 ug/L	519800 ppb	18:37:52
3	Sr 421.552†	874.5	873.5	1.8288 ug/L	1.8288 ppb	18:37:57
3	Sc 361.383	827698.6	827698.6	83.439 %		18:38:55
3	Y 371.029	701245.1	701245.1	81.544 %		18:38:55
3	Ag 328.068†	-23983.6	-29118.6	1.5703 ug/L	1.5703 ppb	18:38:55
3	As 188.979†	-183.8	-183.7	27.749 ug/L	27.749 ppb	18:39:15
3	B 249.677†	1993.4	2730.2	-8.9795 ug/L	-8.9795 ppb	18:38:55
3	Ba 233.527†	-1678.9	-1995.8	-2.6963 ug/L	-2.6963 ppb	18:39:15
3	Be 313.107†	-11574.1	-9068.9	-3.3530 ug/L	-3.3530 ppb	18:38:55
3	Cd 226.502†	3646.0	4553.3	8.2827 ug/L	8.2827 ppb	18:39:15
3	Co 228.616†	231.6	346.6	0.8884 ug/L	0.8884 ppb	18:39:15
3	Cr 267.716†	-34.3	-110.4	1.9193 ug/L	1.9193 ppb	18:39:15
3	Cu 324.752†	3058.3	-5304.8	0.6518 ug/L	0.6518 ppb	18:38:55
3	Mn 257.610†	-24033.8	-29374.3	-9.5694 ug/L	-9.5694 ppb	18:38:55
3	Mo 202.031†	-506.9	-618.1	-2.5376 ug/L	-2.5376 ppb	18:39:15
3	Ni 231.604†	314.3	296.2	7.1655 ug/L	7.1655 ppb	18:39:15
3	P 214.914†	605.9	477.5	39.388 ug/L	39.388 ppb	18:39:15
3	Pb 220.353†	-459.4	-505.5	16.119 ug/L	16.119 ppb	18:39:15
3	S 181.975 Axial†	77.2	49.8	-29.782 ug/L	-29.782 ppb	18:39:15
3	Sb 206.836†	66.6	44.9	9.6420 ug/L	9.6420 ppb	18:39:15
3	Se 196.026†	-2309.2	-2743.9	-11.702 ug/L	-11.702 ppb	18:39:15
3	Si 251.611†	-460.9	-956.0	-28.680 ug/L	-28.680 ppb	18:39:15
3	Sn 189.927†	-374.4	-449.8	-1.8862 ug/L	-1.8862 ppb	18:39:15
3	Ti 334.940†	-11509.7	-12779.6	-1.9249 ug/L	-1.9249 ppb	18:38:55
3	Tl 190.801†	-109.6	-86.3	-28.350 ug/L	-28.350 ppb	18:39:15
3	U 409.014†	453586.0	546410.6	13899 ug/L	13899 ppb	18:38:55
3	V 292.402†	2735.0	4744.1	2.2412 ug/L	2.2412 ppb	18:39:15
3	Zn 213.857†	6313.0	6645.3	17.839 ug/L	17.839 ppb	18:39:15
3	SiO2†	-514.7	-1014.5	-65.011 ug/L	-65.011 ppb	18:39:31

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	833782.0	84.052	%	0.5663				0.67%
Sc Radial	4909.2	93.1	%	0.55				0.59%
Y 371.029	706544.0	82.160	%	0.5904				0.72%
Y RADIAL	5175.3	93.70	%	0.320				0.34%
Ag 328.068†	-29208.1	0.9126	ug/L	0.60723	0.9126	ppb	0.60723	66.54%
Al 396.153Radial†	634864.9	512850	ug/L	3353.4	512850	ppb	3353.4	0.65%
QC value within limits for Al 396.153Radial Recovery = 102.57%								
As 188.979†	-191.0	24.522	ug/L	2.9827	24.522	ppb	2.9827	12.16%
B 249.677†	2655.1	-10.550	ug/L	2.1055	-10.550	ppb	2.1055	19.96%
Ba 233.527†	-1977.0	-2.5718	ug/L	0.14140	-2.5718	ppb	0.14140	5.50%
Be 313.107†	-9053.1	-3.3474	ug/L	0.01252	-3.3474	ppb	0.01252	0.37%
Ca 317.933Radial†	284498.1	473590	ug/L	2703.6	473590	ppb	2703.6	0.57%
QC value within limits for Ca 317.933Radial Recovery = 94.72%								
Cd 226.502†	4544.0	8.2762	ug/L	0.31254	8.2762	ppb	0.31254	3.78%
Co 228.616†	313.8	0.2090	ug/L	0.59101	0.2090	ppb	0.59101	282.85%
Cr 267.716†	-123.3	1.7631	ug/L	0.14874	1.7631	ppb	0.14874	8.44%
Cu 324.752†	-5274.1	0.6860	ug/L	0.03413	0.6860	ppb	0.03413	4.98%

Fe 238.204 Radial†	45911.3	440230	ug/L	1184.5	440230	ppb	1184.5	0.27%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 88.05%								
K 766.490 Radial†	129.0	-337.31	ug/L	4.691	-337.31	ppb	4.691	1.39%
Mg 279.077 IEC†	12870.1	490930	ug/L	2539.2	490930	ppb	2539.2	0.52%
QC value within limits for Mg 279.077 IEC Recovery = 98.19%								
Mn 257.610†	-29545.2	-9.8162	ug/L	0.36016	-9.8162	ppb	0.36016	3.67%
Mo 202.031†	-620.4	-2.7954	ug/L	0.74176	-2.7954	ppb	0.74176	26.54%
Na 589.592 Radial†	1702355.7	518440	ug/L	2443.5	518440	ppb	2443.5	0.47%
QC value within limits for Na 589.592 Radial Recovery = 103.69%								
Ni 231.604†	249.6	6.0365	ug/L	0.99178	6.0365	ppb	0.99178	16.43%
P 214.914†	462.2	30.932	ug/L	7.7781	30.932	ppb	7.7781	25.15%
Pb 220.353†	-501.6	16.040	ug/L	0.9881	16.040	ppb	0.9881	6.16%
S 181.975 Axial†	62.9	-11.693	ug/L	30.8673	-11.693	ppb	30.8673	263.97%
Sb 206.836†	52.1	11.980	ug/L	2.0794	11.980	ppb	2.0794	17.36%
Se 196.026†	-2732.8	-8.9475	ug/L	3.61165	-8.9475	ppb	3.61165	40.37%
Si 251.611†	-965.7	-28.974	ug/L	0.7157	-28.974	ppb	0.7157	2.47%
Sn 189.927†	-451.3	-2.4786	ug/L	2.38074	-2.4786	ppb	2.38074	96.05%
Sr 421.552†	879.8	1.8828	ug/L	0.09804	1.8828	ppb	0.09804	5.21%
Ti 334.940†	-12834.6	-2.2099	ug/L	0.27359	-2.2099	ppb	0.27359	12.38%
Tl 190.801†	-90.4	-29.648	ug/L	2.1438	-29.648	ppb	2.1438	7.23%
U 409.014†	546610.4	13904	ug/L	19.4	13904	ppb	19.4	0.14%
QC value within limits for U 409.014 Recovery = 92.69%								
V 292.402†	4807.2	2.7778	ug/L	0.49978	2.7778	ppb	0.49978	17.99%
Zn 213.857†	6565.4	17.207	ug/L	0.5476	17.207	ppb	0.5476	3.18%
SiO2†	-1000.5	-64.091	ug/L	5.3482	-64.091	ppb	5.3482	8.34%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 1/29/2010 18:41:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5366.0	5366.0	102	%			18:43:39
1	Y RADIAL	5595.6	5595.6	101.3	%			18:43:39
1	Al 396.153Radial†	458.0	557.1	-23.669	ug/L	-23.669	ppb	18:43:39
1	Ca 317.933Radial†	35.4	14.1	23.462	ug/L	23.462	ppb	18:43:59
1	Fe 238.204 Radial†	-16.9	-26.7	29.153	ug/L	29.153	ppb	18:43:59
1	K 766.490 Radial†	1712866.4	1681032.2	303540	ug/L	303540	ppb	18:43:34
1	Mg 279.077 IEC†	-7.1	-8.4	-217.41	ug/L	-217.41	ppb	18:43:59
1	Na 589.592 Radial†	-236.4	355.3	108.19	ug/L	108.19	ppb	18:43:39
1	Sr 421.552†	1609209.0	1581734.6	9742.4	ug/L	9742.4	ppb	18:43:34
1	Sc 361.383	915983.0	915983.0	92.338	%			18:45:16
1	Y 371.029	774669.4	774669.4	90.082	%			18:45:16
1	Ag 328.068†	-7759.3	-8777.7	3.4295	ug/L	3.4295	ppb	18:45:22
1	As 188.979†	21363.4	23172.5	9589.8	ug/L	9589.8	ppb	18:45:22
1	B 249.677†	201161.2	218193.4	4982.5	ug/L	4982.5	ppb	18:45:16
1	Ba 233.527†	1550112.1	1678747.4	13638	ug/L	13638	ppb	18:45:16
1	Be 313.107†	7412849.1	8032724.9	2953.9	ug/L	2953.9	ppb	18:45:10
1	Cd 226.502†	796003.4	862234.5	9688.7	ug/L	9688.7	ppb	18:45:16
1	Co 228.616†	416431.0	451053.0	9530.8	ug/L	9530.8	ppb	18:45:22
1	Cr 267.716†	2097506.0	2271475.1	24049	ug/L	24049	ppb	18:45:16
1	Cu 324.752†	6876184.6	7437758.7	20999	ug/L	20999	ppb	18:45:10
1	Mn 257.610†	8027397.5	8692892.2	9769.6	ug/L	9769.6	ppb	18:45:10
1	Mo 202.031†	131356.7	142245.3	9768.3	ug/L	9768.3	ppb	18:45:22
1	Ni 231.604†	367255.6	397647.7	9619.2	ug/L	9619.2	ppb	18:45:22
1	P 214.914†	30483.0	32763.7	14037	ug/L	14037	ppb	18:45:22
1	Pb 220.353†	189199.6	204943.4	24652	ug/L	24652	ppb	18:45:22
1	S 181.975 Axial†	36305.5	39275.2	52746	ug/L	52746	ppb	18:45:22
1	Sb 206.836†	31065.7	33608.5	11158	ug/L	11158	ppb	18:45:22
1	Se 196.026†	16988.3	18421.6	10121	ug/L	10121	ppb	18:45:22
1	Si 251.611†	1445926.1	1565496.7	47701	ug/L	47701	ppb	18:45:16
1	Sn 189.927†	53270.6	57689.6	10464	ug/L	10464	ppb	18:45:22
1	Ti 334.940†	6165246.2	6677815.7	10120	ug/L	10120	ppb	18:45:10
1	Tl 190.801†	28361.5	30759.8	10024	ug/L	10024	ppb	18:45:22
1	U 409.014†	-1351.7	1330.0	-19.804	ug/L	-19.804	ppb	18:45:22
1	V 292.402†	1430073.8	1550198.9	10205	ug/L	10205	ppb	18:45:16
1	Zn 213.857†	1421888.7	1538947.6	13958	ug/L	13958	ppb	18:45:16
1	SiO2†	1449527.2	1569402.5	102090	ug/L	102090	ppb	18:46:08
2	Sc Radial	5389.6	5389.6	102	%			18:44:10
2	Y RADIAL	5628.1	5628.1	101.9	%			18:44:10
2	Al 396.153Radial†	448.2	545.6	-31.421	ug/L	-31.421	ppb	18:44:10
2	Ca 317.933Radial†	39.5	18.0	29.956	ug/L	29.956	ppb	18:44:30
2	Fe 238.204 Radial†	-19.0	-28.7	8.9784	ug/L	8.9784	ppb	18:44:30
2	K 766.490 Radial†	1756663.8	1716539.9	309950	ug/L	309950	ppb	18:44:05
2	Mg 279.077 IEC†	-4.7	-5.9	-123.80	ug/L	-123.80	ppb	18:44:30
2	Na 589.592 Radial†	-300.8	293.3	89.315	ug/L	89.315	ppb	18:44:10
2	Sr 421.552†	1652223.4	1616921.2	9959.1	ug/L	9959.1	ppb	18:44:05
2	Sc 361.383	913344.9	913344.9	92.072	%			18:45:36
2	Y 371.029	773345.8	773345.8	89.928	%			18:45:36
2	Ag 328.068†	-7665.8	-8700.3	3.7498	ug/L	3.7498	ppb	18:45:42
2	As 188.979†	21269.5	23137.4	9575.8	ug/L	9575.8	ppb	18:45:42
2	B 249.677†	200306.6	217894.5	4975.8	ug/L	4975.8	ppb	18:45:36
2	Ba 233.527†	1543280.6	1676176.5	13617	ug/L	13617	ppb	18:45:36
2	Be 313.107†	7419586.1	8063229.6	2965.1	ug/L	2965.1	ppb	18:45:30
2	Cd 226.502†	792525.8	860947.4	9674.3	ug/L	9674.3	ppb	18:45:36
2	Co 228.616†	413676.2	449363.6	9494.9	ug/L	9494.9	ppb	18:45:42
2	Cr 267.716†	2089960.8	2269841.3	24031	ug/L	24031	ppb	18:45:36
2	Cu 324.752†	6891772.6	7476197.8	21108	ug/L	21108	ppb	18:45:30
2	Mn 257.610†	8031888.6	8722880.0	9803.3	ug/L	9803.3	ppb	18:45:30
2	Mo 202.031†	130540.3	141769.5	9735.7	ug/L	9735.7	ppb	18:45:42
2	Ni 231.604†	364920.4	396260.3	9585.6	ug/L	9585.6	ppb	18:45:42

2	P 214.914†	30237.4	32592.2	13920	ug/L	13920 ppb	18:45:42
2	Pb 220.353†	188045.7	204281.9	24573	ug/L	24573 ppb	18:45:42
2	S 181.975 Axial†	36023.0	39081.9	52487	ug/L	52487 ppb	18:45:42
2	Sb 206.836†	30892.4	33517.4	11127	ug/L	11127 ppb	18:45:42
2	Se 196.026†	16902.9	18381.9	10099	ug/L	10099 ppb	18:45:42
2	Si 251.611†	1440016.7	1563601.4	47644	ug/L	47644 ppb	18:45:36
2	Sn 189.927†	52960.2	57519.0	10434	ug/L	10434 ppb	18:45:42
2	Ti 334.940†	6175880.3	6708650.6	10167	ug/L	10167 ppb	18:45:30
2	Tl 190.801†	28141.4	30609.4	9976.3	ug/L	9976.3 ppb	18:45:42
2	U 409.014†	-1332.3	1346.8	-19.333	ug/L	-19.333 ppb	18:45:42
2	V 292.402†	1425908.5	1550148.3	10204	ug/L	10204 ppb	18:45:36
2	Zn 213.857†	1415452.2	1536404.7	13935	ug/L	13935 ppb	18:45:36
2	SiO2†	1442560.4	1566370.1	101890	ug/L	101890 ppb	18:46:14
3	Sc Radial	5251.6	5251.6	99.6	%		18:44:40
3	Y RADIAL	5493.5	5493.5	99.46	%		18:44:40
3	Al 396.153Radial†	436.6	545.4	-37.023	ug/L	-37.023 ppb	18:44:40
3	Ca 317.933Radial†	39.7	19.1	31.856	ug/L	31.856 ppb	18:45:00
3	Fe 238.204 Radial†	-16.3	-26.4	33.069	ug/L	33.069 ppb	18:45:00
3	K 766.490 Radial†	1683807.3	1688518.8	304890	ug/L	304890 ppb	18:44:35
3	Mg 279.077 IEC†	-4.1	-5.4	-104.69	ug/L	-104.69 ppb	18:45:00
3	Na 589.592 Radial†	-289.8	296.6	90.322	ug/L	90.322 ppb	18:44:40
3	Sr 421.552†	1578786.4	1585632.5	9766.4	ug/L	9766.4 ppb	18:44:35
3	Sc 361.383	905363.2	905363.2	91.268	%		18:45:56
3	Y 371.029	768053.0	768053.0	89.313	%		18:45:56
3	Ag 328.068†	-7637.5	-8742.7	3.6072	ug/L	3.6072 ppb	18:46:01
3	As 188.979†	21327.2	23404.2	9684.0	ug/L	9684.0 ppb	18:46:01
3	B 249.677†	197854.3	217125.5	4957.9	ug/L	4957.9 ppb	18:45:56
3	Ba 233.527†	1529092.2	1675407.6	13611	ug/L	13611 ppb	18:45:56
3	Be 313.107†	7274432.8	7975231.3	2932.7	ug/L	2932.7 ppb	18:45:50
3	Cd 226.502†	786052.7	861443.4	9679.9	ug/L	9679.9 ppb	18:45:56
3	Co 228.616†	413714.4	453366.4	9580.1	ug/L	9580.1 ppb	18:46:01
3	Cr 267.716†	2075450.2	2273953.8	24075	ug/L	24075 ppb	18:45:56
3	Cu 324.752†	6732813.5	7368019.0	20802	ug/L	20802 ppb	18:45:50
3	Mn 257.610†	7851680.7	8602336.0	9667.8	ug/L	9667.8 ppb	18:45:50
3	Mo 202.031†	130900.0	143413.5	9848.6	ug/L	9848.6 ppb	18:46:01
3	Ni 231.604†	365539.0	400432.2	9686.5	ug/L	9686.5 ppb	18:46:01
3	P 214.914†	30197.5	32838.0	14118	ug/L	14118 ppb	18:46:01
3	Pb 220.353†	188437.6	206511.9	24841	ug/L	24841 ppb	18:46:01
3	S 181.975 Axial†	36025.3	39429.3	52953	ug/L	52953 ppb	18:46:01
3	Sb 206.836†	30889.6	33810.2	11226	ug/L	11226 ppb	18:46:01
3	Se 196.026†	16903.0	18543.9	10189	ug/L	10189 ppb	18:46:01
3	Si 251.611†	1423948.8	1559784.3	47526	ug/L	47526 ppb	18:45:56
3	Sn 189.927†	53050.1	58124.6	10543	ug/L	10543 ppb	18:46:01
3	Ti 334.940†	6036905.2	6615513.0	10025	ug/L	10025 ppb	18:45:50
3	Tl 190.801†	28247.2	30994.8	10099	ug/L	10099 ppb	18:46:01
3	U 409.014†	-1468.4	1184.9	-23.566	ug/L	-23.566 ppb	18:46:01
3	V 292.402†	1414386.6	1551177.2	10213	ug/L	10213 ppb	18:45:56
3	Zn 213.857†	1404105.1	1537524.9	13945	ug/L	13945 ppb	18:45:56
3	SiO2†	1452172.6	1590714.5	103480	ug/L	103480 ppb	18:46:19

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911563.7	91.893	%	0.5574				0.61%
Sc Radial	5335.8	101	%	1.4				1.38%
Y 371.029	772022.7	89.774	%	0.4071				0.45%
Y RADIAL	5572.4	100.9	%	1.27				1.26%
Ag 328.068†	-8740.2	3.5955	ug/L	0.16047	3.5955	ppb	0.16047	4.46%
Al 396.153Radial†	549.4	-30.704	ug/L	6.7060	-30.704	ppb	6.7060	21.84%
As 188.979†	23238.0	9616.5	ug/L	58.84	9616.5	ppb	58.84	0.61%
QC value within limits for As 188.979 Recovery = 96.17%								
B 249.677†	217737.8	4972.0	ug/L	12.74	4972.0	ppb	12.74	0.26%
QC value within limits for B 249.677 Recovery = 99.44%								
Ba 233.527†	1676777.2	13622	ug/L	14.2	13622	ppb	14.2	0.10%
QC value within limits for Ba 233.527 Recovery = 90.81%								
Be 313.107†	8023728.6	2950.6	ug/L	16.47	2950.6	ppb	16.47	0.56%
QC value within limits for Be 313.107 Recovery = 98.35%								
Ca 317.933Radial†	17.1	28.425	ug/L	4.4014	28.425	ppb	4.4014	15.48%
Cd 226.502†	861541.8	9681.0	ug/L	7.30	9681.0	ppb	7.30	0.08%
QC value within limits for Cd 226.502 Recovery = 96.81%								

Co 228.616†	451261.0	9535.3 ug/L	42.74	9535.3 ppb	42.74	0.45%
QC value within limits for Co 228.616 Recovery = 95.35%						
Cr 267.716†	2271756.7	24052 ug/L	21.9	24052 ppb	21.9	0.09%
QC value within limits for Cr 267.716 Recovery = 96.21%						
Cu 324.752†	7427325.1	20970 ug/L	154.8	20970 ppb	154.8	0.74%
QC value within limits for Cu 324.752 Recovery = 104.85%						
Fe 238.204 Radial†	-27.3	23.733 ug/L	12.9273	23.733 ppb	12.9273	54.47%
K 766.490 Radial†	1695363.6	306130 ug/L	3379.9	306130 ppb	3379.9	1.10%
QC value within limits for K 766.490 Radial Recovery = 102.04%						
Mg 279.077 IEC†	-6.6	-148.63 ug/L	60.325	-148.63 ppb	60.325	40.59%
Mn 257.610†	8672702.8	9746.9 ug/L	70.53	9746.9 ppb	70.53	0.72%
QC value within limits for Mn 257.610 Recovery = 97.47%						
Mo 202.031†	142476.1	9784.2 ug/L	58.09	9784.2 ppb	58.09	0.59%
QC value within limits for Mo 202.031 Recovery = 97.84%						
Na 589.592 Radial†	315.0	95.943 ug/L	10.6193	95.943 ppb	10.6193	11.07%
Ni 231.604†	398113.4	9630.4 ug/L	51.40	9630.4 ppb	51.40	0.53%
QC value within limits for Ni 231.604 Recovery = 96.30%						
P 214.914†	32731.3	14025 ug/L	99.3	14025 ppb	99.3	0.71%
QC value within limits for P 214.914 Recovery = 93.50%						
Pb 220.353†	205245.7	24689 ug/L	137.9	24689 ppb	137.9	0.56%
QC value within limits for Pb 220.353 Recovery = 98.75%						
S 181.975 Axial†	39262.1	52729 ug/L	233.8	52729 ppb	233.8	0.44%
QC value within limits for S 181.975 Axial Recovery = 105.46%						
Sb 206.836†	33645.4	11170 ug/L	50.5	11170 ppb	50.5	0.45%
QC value greater than the upper limit for Sb 206.836 Recovery = 111.70%						
Se 196.026†	18449.2	10136 ug/L	46.5	10136 ppb	46.5	0.46%
QC value within limits for Se 196.026 Recovery = 101.36%						
Si 251.611†	1562960.8	47624 ug/L	89.5	47624 ppb	89.5	0.19%
QC value within limits for Si 251.611 Recovery = 95.25%						
Sn 189.927†	57777.7	10480 ug/L	56.6	10480 ppb	56.6	0.54%
QC value within limits for Sn 189.927 Recovery = 104.80%						
Sr 421.552†	1594762.8	9822.6 ug/L	118.80	9822.6 ppb	118.80	1.21%
QC value within limits for Sr 421.552 Recovery = 98.23%						
Ti 334.940†	6667326.4	10104 ug/L	72.0	10104 ppb	72.0	0.71%
QC value within limits for Ti 334.940 Recovery = 101.04%						
Tl 190.801†	30788.0	10033 ug/L	61.7	10033 ppb	61.7	0.62%
QC value within limits for Tl 190.801 Recovery = 100.33%						
U 409.014†	1287.2	-20.901 ug/L	2.3202	-20.901 ppb	2.3202	11.10%
V 292.402†	1550508.1	10208 ug/L	4.6	10208 ppb	4.6	0.05%
QC value within limits for V 292.402 Recovery = 102.08%						
Zn 213.857†	1537625.7	13946 ug/L	11.6	13946 ppb	11.6	0.08%
QC value within limits for Zn 213.857 Recovery = 92.97%						
SiO2†	1575495.7	102490 ug/L	863.7	102490 ppb	863.7	0.84%
QC value within limits for SiO2 Recovery = 95.78%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/29/2010 18:48:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5510.1	5510.1	104	%			18:50:22
1	Y RADIAL	5769.0	5769.0	104.5	%			18:50:22
1	Al 396.153Radial†	6339.3	6175.3	4964.8	ug/L	4964.8	ppb	18:50:22
1	Ca 317.933Radial†	3179.4	3022.9	5032.0	ug/L	5032.0	ppb	18:50:42
1	Fe 238.204 Radial†	564.4	530.2	5098.7	ug/L	5098.7	ppb	18:50:42
1	K 766.490 Radial†	33114.2	29038.1	5237.2	ug/L	5237.2	ppb	18:50:22
1	Mg 279.077 IEC†	143.5	136.0	5191.7	ug/L	5191.7	ppb	18:50:42
1	Na 589.592 Radial†	34182.3	33309.4	10144	ug/L	10144	ppb	18:50:22
1	Sr 421.552†	86590.5	82823.9	510.10	ug/L	510.10	ppb	18:50:22
1	Sc 361.383	1021496.0	1021496.0	102.97	%			18:51:40
1	Y 371.029	876136.1	876136.1	101.88	%			18:51:40
1	Ag 328.068†	120016.3	116174.5	496.19	ug/L	496.19	ppb	18:51:45
1	As 188.979†	1253.5	1253.8	519.63	ug/L	519.63	ppb	18:52:05
1	B 249.677†	23029.0	22704.8	519.05	ug/L	519.05	ppb	18:51:45
1	Ba 233.527†	62882.8	61082.5	496.65	ug/L	496.65	ppb	18:51:45
1	Be 313.107†	1387649.8	1352364.1	494.54	ug/L	494.54	ppb	18:51:40
1	Cd 226.502†	45431.1	44302.2	497.39	ug/L	497.39	ppb	18:51:45
1	Co 228.616†	24154.3	23525.6	497.30	ug/L	497.30	ppb	18:51:45
1	Cr 267.716†	48302.3	46837.6	496.19	ug/L	496.19	ppb	18:51:45
1	Cu 324.752†	188819.3	174394.4	492.36	ug/L	492.36	ppb	18:51:45
1	Mn 257.610†	451856.5	438232.6	492.80	ug/L	492.80	ppb	18:51:40
1	Mo 202.031†	7329.2	7106.9	488.50	ug/L	488.50	ppb	18:52:05
1	Ni 231.604†	21254.9	20560.4	497.36	ug/L	497.36	ppb	18:51:45
1	P 214.914†	4739.8	4354.2	2310.6	ug/L	2310.6	ppb	18:52:05
1	Pb 220.353†	4167.8	4092.5	493.64	ug/L	493.64	ppb	18:52:05
1	S 181.975 Axial†	784.8	719.3	965.13	ug/L	965.13	ppb	18:52:05
1	Sb 206.836†	1634.4	1552.3	516.27	ug/L	516.27	ppb	18:52:05
1	Se 196.026†	907.0	904.5	514.18	ug/L	514.18	ppb	18:52:05
1	Si 251.611†	83826.7	81001.4	2468.4	ug/L	2468.4	ppb	18:51:45
1	Sn 189.927†	2776.5	2695.2	489.74	ug/L	489.74	ppb	18:52:05
1	Ti 334.940†	328398.4	319925.9	485.10	ug/L	485.10	ppb	18:51:45
1	Tl 190.801†	1517.3	1518.5	494.68	ug/L	494.68	ppb	18:52:05
1	U 409.014†	17186.8	19484.1	495.72	ug/L	495.72	ppb	18:51:45
1	V 292.402†	76704.6	75954.9	500.73	ug/L	500.73	ppb	18:51:45
1	Zn 213.857†	57090.0	54519.9	493.34	ug/L	493.34	ppb	18:51:45
1	SiO2†	82838.8	80048.0	5207.5	ug/L	5207.5	ppb	18:53:12
2	Sc Radial	5618.6	5618.6	107	%			18:50:47
2	Y RADIAL	5857.4	5857.4	106.1	%			18:50:47
2	Al 396.153Radial†	6163.5	5893.1	4736.0	ug/L	4736.0	ppb	18:50:47
2	Ca 317.933Radial†	3185.4	2969.7	4943.5	ug/L	4943.5	ppb	18:51:07
2	Fe 238.204 Radial†	568.5	523.6	5035.8	ug/L	5035.8	ppb	18:51:07
2	K 766.490 Radial†	32415.0	27769.3	5008.3	ug/L	5008.3	ppb	18:50:47
2	Mg 279.077 IEC†	143.9	133.7	5105.4	ug/L	5105.4	ppb	18:51:07
2	Na 589.592 Radial†	33003.3	31570.4	9614.6	ug/L	9614.6	ppb	18:50:47
2	Sr 421.552†	84016.2	78805.8	485.35	ug/L	485.35	ppb	18:50:47
2	Sc 361.383	993565.5	993565.5	100.16	%			18:52:11
2	Y 371.029	851164.8	851164.8	98.977	%			18:52:11
2	Ag 328.068†	119685.8	119120.9	508.71	ug/L	508.71	ppb	18:52:16
2	As 188.979†	1256.2	1290.7	534.84	ug/L	534.84	ppb	18:52:36
2	B 249.677†	22856.7	23161.4	529.52	ug/L	529.52	ppb	18:52:16
2	Ba 233.527†	62637.2	62554.0	508.61	ug/L	508.61	ppb	18:52:16
2	Be 313.107†	1392791.0	1395379.0	510.26	ug/L	510.26	ppb	18:52:11
2	Cd 226.502†	45152.2	45264.0	508.20	ug/L	508.20	ppb	18:52:16
2	Co 228.616†	24017.1	24047.9	508.35	ug/L	508.35	ppb	18:52:16
2	Cr 267.716†	48074.6	47928.9	507.74	ug/L	507.74	ppb	18:52:16
2	Cu 324.752†	188294.4	179025.0	505.42	ug/L	505.42	ppb	18:52:16
2	Mn 257.610†	454292.1	452999.6	509.40	ug/L	509.40	ppb	18:52:11
2	Mo 202.031†	7365.0	7342.7	504.69	ug/L	504.69	ppb	18:52:36
2	Ni 231.604†	21216.6	21102.4	510.47	ug/L	510.47	ppb	18:52:16

2	P 214.914†	4780.8	4524.5	2402.3 ug/L	2402.3 ppb	18:52:36
2	Pb 220.353†	4193.9	4232.3	510.44 ug/L	510.44 ppb	18:52:36
2	S 181.975 Axial†	792.2	748.2	1004.0 ug/L	1004.0 ppb	18:52:36
2	Sb 206.836†	1653.2	1615.7	537.22 ug/L	537.22 ppb	18:52:36
2	Se 196.026†	906.1	928.3	527.04 ug/L	527.04 ppb	18:52:36
2	Si 251.611†	83408.4	82872.2	2525.3 ug/L	2525.3 ppb	18:52:16
2	Sn 189.927†	2787.9	2782.3	505.53 ug/L	505.53 ppb	18:52:36
2	Ti 334.940†	327367.2	327861.4	497.12 ug/L	497.12 ppb	18:52:16
2	Tl 190.801†	1519.7	1562.3	508.96 ug/L	508.96 ppb	18:52:36
2	U 409.014†	17275.8	20042.1	509.95 ug/L	509.95 ppb	18:52:16
2	V 292.402†	76317.0	77661.9	512.09 ug/L	512.09 ppb	18:52:16
2	Zn 213.857†	56940.8	55929.5	506.11 ug/L	506.11 ppb	18:52:16
2	SiO2†	83266.8	82736.7	5382.4 ug/L	5382.4 ppb	18:53:17
3	Sc Radial	5517.0	5517.0	105 %		18:51:12
3	Y RADIAL	5780.9	5780.9	104.7 %		18:51:12
3	Al 396.153Radial†	6169.3	6005.2	4826.2 ug/L	4826.2 ppb	18:51:12
3	Ca 317.933Radial†	3167.7	3007.8	5007.0 ug/L	5007.0 ppb	18:51:32
3	Fe 238.204 Radial†	565.7	530.8	5105.0 ug/L	5105.0 ppb	18:51:32
3	K 766.490 Radial†	32280.9	28201.8	5086.3 ug/L	5086.3 ppb	18:51:12
3	Mg 279.077 IEC†	140.2	132.7	5066.0 ug/L	5066.0 ppb	18:51:32
3	Na 589.592 Radial†	32800.2	31947.2	9729.4 ug/L	9729.4 ppb	18:51:12
3	Sr 421.552†	83657.1	79915.9	492.19 ug/L	492.19 ppb	18:51:12
3	Sc 361.383	981797.9	981797.9	98.973 %		18:52:42
3	Y 371.029	842386.0	842386.0	97.956 %		18:52:42
3	Ag 328.068†	120104.8	120976.6	516.64 ug/L	516.64 ppb	18:52:47
3	As 188.979†	1260.0	1309.5	542.66 ug/L	542.66 ppb	18:53:07
3	B 249.677†	23013.8	23593.7	539.41 ug/L	539.41 ppb	18:52:47
3	Ba 233.527†	62991.0	63661.1	517.61 ug/L	517.61 ppb	18:52:47
3	Be 313.107†	1384357.5	1403524.9	513.25 ug/L	513.25 ppb	18:52:42
3	Cd 226.502†	45532.3	46188.4	518.58 ug/L	518.58 ppb	18:52:47
3	Co 228.616†	24134.2	24453.7	516.93 ug/L	516.93 ppb	18:52:47
3	Cr 267.716†	48467.6	48901.3	518.04 ug/L	518.04 ppb	18:52:47
3	Cu 324.752†	189048.9	182040.5	513.94 ug/L	513.94 ppb	18:52:47
3	Mn 257.610†	450266.1	454368.2	510.94 ug/L	510.94 ppb	18:52:42
3	Mo 202.031†	7382.6	7448.7	511.97 ug/L	511.97 ppb	18:53:07
3	Ni 231.604†	21276.9	21417.2	518.08 ug/L	518.08 ppb	18:52:47
3	P 214.914†	4799.4	4600.5	2442.6 ug/L	2442.6 ppb	18:53:07
3	Pb 220.353†	4217.4	4306.3	519.36 ug/L	519.36 ppb	18:53:07
3	S 181.975 Axial†	801.7	767.2	1029.5 ug/L	1029.5 ppb	18:53:07
3	Sb 206.836†	1652.1	1634.4	543.46 ug/L	543.46 ppb	18:53:07
3	Se 196.026†	915.7	949.0	538.59 ug/L	538.59 ppb	18:53:07
3	Si 251.611†	83638.5	84102.8	2562.8 ug/L	2562.8 ppb	18:52:47
3	Sn 189.927†	2794.4	2822.3	512.79 ug/L	512.79 ppb	18:53:07
3	Ti 334.940†	329197.2	333627.9	505.88 ug/L	505.88 ppb	18:52:47
3	Tl 190.801†	1536.1	1597.1	520.24 ug/L	520.24 ppb	18:53:07
3	U 409.014†	17271.6	20244.6	515.09 ug/L	515.09 ppb	18:52:47
3	V 292.402†	76970.5	79235.5	522.41 ug/L	522.41 ppb	18:52:47
3	Zn 213.857†	57140.6	56812.7	514.11 ug/L	514.11 ppb	18:52:47
3	SiO2†	82941.0	83404.0	5425.7 ug/L	5425.7 ppb	18:53:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	998953.1	100.70	%	2.055				2.04%
Sc Radial	5548.6	105	%	1.2				1.10%
Y 371.029	856562.3	99.605	%	2.0362				2.04%
Y RADIAL	5802.4	105.1	%	0.87				0.83%
Ag 328.068†	118757.4	507.18	ug/L	10.311	507.18	ppb	10.311	2.03%
QC value within limits for Ag 328.068 Recovery = 101.44%								
Al 396.153Radial†	6024.5	4842.3	ug/L	115.23	4842.3	ppb	115.23	2.38%
QC value within limits for Al 396.153Radial Recovery = 96.85%								
As 188.979†	1284.7	532.38	ug/L	11.710	532.38	ppb	11.710	2.20%
QC value within limits for As 188.979 Recovery = 106.48%								
B 249.677†	23153.3	529.33	ug/L	10.177	529.33	ppb	10.177	1.92%
QC value within limits for B 249.677 Recovery = 105.87%								
Ba 233.527†	62432.5	507.62	ug/L	10.515	507.62	ppb	10.515	2.07%
QC value within limits for Ba 233.527 Recovery = 101.52%								
Be 313.107†	1383756.0	506.02	ug/L	10.053	506.02	ppb	10.053	1.99%
QC value within limits for Be 313.107 Recovery = 101.20%								
Ca 317.933Radial†	3000.1	4994.2	ug/L	45.59	4994.2	ppb	45.59	0.91%

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   QC value within limits for Ca 317.933Radial  Recovery = 99.88%
Cd 226.502†            45251.5      508.06 ug/L        10.599      508.06 ppb        10.599   2.09%
   QC value within limits for Cd 226.502  Recovery = 101.61%
Co 228.616†            24009.1      507.53 ug/L         9.840      507.53 ppb         9.840   1.94%
   QC value within limits for Co 228.616  Recovery = 101.51%
Cr 267.716†            47889.3      507.32 ug/L        10.935      507.32 ppb        10.935   2.16%
   QC value within limits for Cr 267.716  Recovery = 101.46%
Cu 324.752†           178486.6      503.91 ug/L        10.868      503.91 ppb        10.868   2.16%
   QC value within limits for Cu 324.752  Recovery = 100.78%
Fe 238.204 Radial†       528.2      5079.8 ug/L         38.25      5079.8 ppb         38.25   0.75%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.60%
K 766.490 Radial†      28336.4      5110.6 ug/L        116.37      5110.6 ppb        116.37   2.28%
   QC value within limits for K 766.490 Radial  Recovery = 102.21%
Mg 279.077 IEC†          134.1      5121.1 ug/L         64.29      5121.1 ppb         64.29   1.26%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.42%
Mn 257.610†           448533.5      504.38 ug/L        10.056      504.38 ppb        10.056   1.99%
   QC value within limits for Mn 257.610  Recovery = 100.88%
Mo 202.031†             7299.4      501.72 ug/L        12.014      501.72 ppb        12.014   2.39%
   QC value within limits for Mo 202.031  Recovery = 100.34%
Na 589.592 Radial†     32275.7      9829.4 ug/L        278.61      9829.4 ppb        278.61   2.83%
   QC value within limits for Na 589.592 Radial  Recovery = 98.29%
Ni 231.604†            21026.7      508.64 ug/L        10.483      508.64 ppb        10.483   2.06%
   QC value within limits for Ni 231.604  Recovery = 101.73%
P 214.914†              4493.1      2385.1 ug/L         67.66      2385.1 ppb         67.66   2.84%
   QC value within limits for P 214.914  Recovery = 95.41%
Pb 220.353†             4210.4      507.81 ug/L        13.057      507.81 ppb        13.057   2.57%
   QC value within limits for Pb 220.353  Recovery = 101.56%
S 181.975 Axial†         744.9      999.53 ug/L        32.411      999.53 ppb        32.411   3.24%
   QC value within limits for S 181.975 Axial  Recovery = 99.95%
Sb 206.836†             1600.8      532.32 ug/L        14.244      532.32 ppb        14.244   2.68%
   QC value within limits for Sb 206.836  Recovery = 106.46%
Se 196.026†              927.3      526.60 ug/L        12.211      526.60 ppb        12.211   2.32%
   QC value within limits for Se 196.026  Recovery = 105.32%
Si 251.611†            82658.8      2518.8 ug/L         47.56      2518.8 ppb         47.56   1.89%
   QC value within limits for Si 251.611  Recovery = 100.75%
Sn 189.927†             2766.6      502.69 ug/L        11.789      502.69 ppb        11.789   2.35%
   QC value within limits for Sn 189.927  Recovery = 100.54%
Sr 421.552†            80515.2      495.88 ug/L        12.780      495.88 ppb        12.780   2.58%
   QC value within limits for Sr 421.552  Recovery = 99.18%
Ti 334.940†           327138.4      496.03 ug/L        10.429      496.03 ppb        10.429   2.10%
   QC value within limits for Ti 334.940  Recovery = 99.21%
Tl 190.801†             1559.3      507.96 ug/L        12.805      507.96 ppb        12.805   2.52%
   QC value within limits for Tl 190.801  Recovery = 101.59%
U 409.014†             19923.6      506.92 ug/L        10.032      506.92 ppb        10.032   1.98%
   QC value within limits for U 409.014  Recovery = 101.38%
V 292.402†             77617.4      511.74 ug/L        10.845      511.74 ppb        10.845   2.12%
   QC value within limits for V 292.402  Recovery = 102.35%
Zn 213.857†            55754.1      504.52 ug/L        10.475      504.52 ppb        10.475   2.08%
   QC value within limits for Zn 213.857  Recovery = 100.90%
SiO2†                  82062.9      5338.5 ug/L        115.55      5338.5 ppb        115.55   2.16%
   QC value within limits for SiO2  Recovery = 99.83%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/29/2010 18:55:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5540.3	5540.3	105	%			18:57:25
1	Y RADIAL	5823.4	5823.4	105.4	%			18:57:25
1	Al 396.153Radial†	-111.0	1.3	1.0230	ug/L	1.0230	ppb	18:57:45
1	Ca 317.933Radial†	22.9	1.1	1.7656	ug/L	1.7656	ppb	18:57:45
1	Fe 238.204 Radial†	9.3	-1.2	-11.703	ug/L	-11.703	ppb	18:57:45
1	K 766.490 Radial†	2996.2	191.3	34.547	ug/L	34.547	ppb	18:57:25
1	Mg 279.077 IEC†	2.6	1.1	41.491	ug/L	41.491	ppb	18:57:45
1	Na 589.592 Radial†	-606.4	10.3	3.1508	ug/L	3.1508	ppb	18:57:25
1	Sr 421.552†	89.7	18.7	0.1151	ug/L	0.1151	ppb	18:57:25
1	Sc 361.383	997424.1	997424.1	100.55	%			18:58:42
1	Y 371.029	864830.1	864830.1	100.57	%			18:58:42
1	Ag 328.068†	439.4	62.5	0.2654	ug/L	0.2654	ppb	18:58:47
1	As 188.979†	13.5	49.9	20.514	ug/L	20.514	ppb	18:59:07
1	B 249.677†	508.8	847.1	19.451	ug/L	19.451	ppb	18:59:07
1	Ba 233.527†	17.2	33.5	0.2716	ug/L	0.2716	ppb	18:59:07
1	Be 313.107†	-4599.5	228.0	0.0836	ug/L	0.0836	ppb	18:58:47
1	Cd 226.502†	-145.5	38.9	0.4372	ug/L	0.4372	ppb	18:59:07
1	Co 228.616†	-52.5	16.9	0.3571	ug/L	0.3571	ppb	18:59:07
1	Cr 267.716†	87.6	17.9	0.1907	ug/L	0.1907	ppb	18:59:07
1	Cu 324.752†	9225.7	205.3	0.5809	ug/L	0.5809	ppb	18:58:47
1	Mn 257.610†	636.1	62.5	0.0674	ug/L	0.0674	ppb	18:59:07
1	Mo 202.031†	13.1	2.4	0.1662	ug/L	0.1662	ppb	18:59:07
1	Ni 231.604†	92.0	11.0	0.2664	ug/L	0.2664	ppb	18:59:07
1	P 214.914†	244.1	-5.9	-3.3538	ug/L	-3.3538	ppb	18:59:07
1	Pb 220.353†	-16.2	29.0	3.4852	ug/L	3.4852	ppb	18:59:07
1	S 181.975 Axial†	40.6	-2.4	-3.2010	ug/L	-3.2010	ppb	18:59:07
1	Sb 206.836†	71.5	36.3	11.701	ug/L	11.701	ppb	18:59:07
1	Se 196.026†	-18.6	5.2	2.8251	ug/L	2.8251	ppb	18:59:07
1	Si 251.611†	546.2	139.6	4.2610	ug/L	4.2610	ppb	18:59:07
1	Sn 189.927†	16.6	15.4	2.7905	ug/L	2.7905	ppb	18:59:07
1	Ti 334.940†	-900.9	118.7	0.1784	ug/L	0.1784	ppb	18:58:47
1	Tl 190.801†	-27.4	17.8	5.7443	ug/L	5.7443	ppb	18:59:07
1	U 409.014†	-2953.6	-143.7	-3.6666	ug/L	-3.6666	ppb	18:58:47
1	V 292.402†	-1430.9	43.1	0.2782	ug/L	0.2782	ppb	18:58:47
1	Zn 213.857†	1092.7	165.9	1.5134	ug/L	1.5134	ppb	18:59:07
1	SiO2†	531.9	131.3	8.5590	ug/L	8.5590	ppb	19:00:13
2	Sc Radial	5546.8	5546.8	105	%			18:57:50
2	Y RADIAL	5846.6	5846.6	105.9	%			18:57:50
2	Al 396.153Radial†	-115.3	-2.7	-2.2194	ug/L	-2.2194	ppb	18:58:10
2	Ca 317.933Radial†	28.5	6.5	10.740	ug/L	10.740	ppb	18:58:10
2	Fe 238.204 Radial†	8.7	-1.8	-17.093	ug/L	-17.093	ppb	18:58:10
2	K 766.490 Radial†	3091.6	278.7	50.321	ug/L	50.321	ppb	18:57:50
2	Mg 279.077 IEC†	1.3	-0.2	-6.4976	ug/L	-6.4976	ppb	18:58:10
2	Na 589.592 Radial†	-603.7	13.5	4.1224	ug/L	4.1224	ppb	18:57:50
2	Sr 421.552†	76.3	5.8	0.0357	ug/L	0.0357	ppb	18:57:50
2	Sc 361.383	994612.2	994612.2	100.26	%			18:59:12
2	Y 371.029	863076.7	863076.7	100.36	%			18:59:12
2	Ag 328.068†	404.1	28.5	0.1198	ug/L	0.1198	ppb	18:59:17
2	As 188.979†	-3.0	33.5	13.756	ug/L	13.756	ppb	18:59:37
2	B 249.677†	487.4	827.2	18.995	ug/L	18.995	ppb	18:59:37
2	Ba 233.527†	13.4	29.8	0.2413	ug/L	0.2413	ppb	18:59:37
2	Be 313.107†	-4496.5	317.8	0.1162	ug/L	0.1162	ppb	18:59:17
2	Cd 226.502†	-134.9	49.0	0.5517	ug/L	0.5517	ppb	18:59:37
2	Co 228.616†	-67.4	1.8	0.0387	ug/L	0.0387	ppb	18:59:37
2	Cr 267.716†	91.6	22.1	0.2352	ug/L	0.2352	ppb	18:59:37
2	Cu 324.752†	9063.2	69.2	0.1969	ug/L	0.1969	ppb	18:59:17
2	Mn 257.610†	600.2	28.5	0.0306	ug/L	0.0306	ppb	18:59:37
2	Mo 202.031†	13.8	3.2	0.2184	ug/L	0.2184	ppb	18:59:37
2	Ni 231.604†	100.8	20.1	0.4858	ug/L	0.4858	ppb	18:59:37

2	P 214.914†	233.4	-15.9	-8.8172 ug/L	-8.8172 ppb	18:59:37
2	Pb 220.353†	-16.2	29.0	3.4827 ug/L	3.4827 ppb	18:59:37
2	S 181.975 Axial†	49.5	6.6	8.8312 ug/L	8.8312 ppb	18:59:37
2	Sb 206.836†	59.6	24.6	7.9394 ug/L	7.9394 ppb	18:59:37
2	Se 196.026†	-9.0	14.8	8.0421 ug/L	8.0421 ppb	18:59:37
2	Si 251.611†	518.4	113.4	3.4624 ug/L	3.4624 ppb	18:59:37
2	Sn 189.927†	11.6	10.5	1.8970 ug/L	1.8970 ppb	18:59:37
2	Ti 334.940†	-960.6	56.6	0.0896 ug/L	0.0896 ppb	18:59:17
2	Tl 190.801†	-33.9	11.3	3.6473 ug/L	3.6473 ppb	18:59:37
2	U 409.014†	-2974.5	-172.8	-4.4106 ug/L	-4.4106 ppb	18:59:17
2	V 292.402†	-1437.3	32.7	0.2095 ug/L	0.2095 ppb	18:59:17
2	Zn 213.857†	1097.0	173.3	1.5800 ug/L	1.5800 ppb	18:59:37
2	SiO2†	551.9	152.8	9.9592 ug/L	9.9592 ppb	19:00:18
3	Sc Radial	5558.2	5558.2	105 %		18:58:15
3	Y RADIAL	5841.7	5841.7	105.8 %		18:58:15
3	Al 396.153Radial†	-101.1	10.9	8.8254 ug/L	8.8254 ppb	18:58:35
3	Ca 317.933Radial†	23.9	2.0	3.3189 ug/L	3.3189 ppb	18:58:35
3	Fe 238.204 Radial†	6.3	-4.1	-39.149 ug/L	-39.149 ppb	18:58:35
3	K 766.490 Radial†	3039.8	223.5	40.369 ug/L	40.369 ppb	18:58:15
3	Mg 279.077 IEC†	5.2	3.5	134.68 ug/L	134.68 ppb	18:58:35
3	Na 589.592 Radial†	-647.5	-26.8	-8.1749 ug/L	-8.1749 ppb	18:58:15
3	Sr 421.552†	81.2	10.4	0.0638 ug/L	0.0638 ppb	18:58:15
3	Sc 361.383	1075568.6	1075568.6	108.43 %		18:59:42
3	Y 371.029	934822.2	934822.2	108.71 %		18:59:42
3	Ag 328.068†	544.4	127.6	0.5321 ug/L	0.5321 ppb	18:59:47
3	As 188.979†	-1.3	35.3	14.502 ug/L	14.502 ppb	19:00:07
3	B 249.677†	491.0	793.9	18.234 ug/L	18.234 ppb	19:00:07
3	Ba 233.527†	-8.9	8.2	0.0665 ug/L	0.0665 ppb	19:00:07
3	Be 313.107†	-4421.3	724.7	0.2650 ug/L	0.2650 ppb	18:59:47
3	Cd 226.502†	-152.7	42.7	0.4835 ug/L	0.4835 ppb	19:00:07
3	Co 228.616†	-66.1	8.1	0.1725 ug/L	0.1725 ppb	19:00:07
3	Cr 267.716†	100.6	23.5	0.2492 ug/L	0.2492 ppb	19:00:07
3	Cu 324.752†	9143.7	-536.9	-1.5173 ug/L	-1.5173 ppb	18:59:47
3	Mn 257.610†	615.8	-2.2	-0.0118 ug/L	-0.0118 ppb	19:00:07
3	Mo 202.031†	15.7	3.9	0.2634 ug/L	0.2634 ppb	19:00:07
3	Ni 231.604†	101.8	13.4	0.3248 ug/L	0.3248 ppb	19:00:07
3	P 214.914†	251.2	-17.0	-9.0459 ug/L	-9.0459 ppb	19:00:07
3	Pb 220.353†	-33.7	14.1	1.6997 ug/L	1.6997 ppb	19:00:07
3	S 181.975 Axial†	48.5	1.9	2.6092 ug/L	2.6092 ppb	19:00:07
3	Sb 206.836†	69.2	29.0	9.3473 ug/L	9.3473 ppb	19:00:07
3	Se 196.026†	-10.4	14.1	7.6110 ug/L	7.6110 ppb	19:00:07
3	Si 251.611†	542.5	96.7	2.9518 ug/L	2.9518 ppb	19:00:07
3	Sn 189.927†	16.4	14.0	2.5388 ug/L	2.5388 ppb	19:00:07
3	Ti 334.940†	-919.3	166.8	0.2429 ug/L	0.2429 ppb	18:59:47
3	Tl 190.801†	-32.1	15.4	4.9902 ug/L	4.9902 ppb	19:00:07
3	U 409.014†	-3081.4	-48.2	-1.2257 ug/L	-1.2257 ppb	18:59:47
3	V 292.402†	-1495.2	87.2	0.5769 ug/L	0.5769 ppb	18:59:47
3	Zn 213.857†	1081.6	76.7	0.7042 ug/L	0.7042 ppb	19:00:07
3	SiO2†	616.4	170.8	11.134 ug/L	11.134 ppb	19:00:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1022535.0	103.08	%	4.632				4.49%
Sc Radial	5548.4	105	%	0.2				0.16%
Y 371.029	887576.3	103.21	%	4.759				4.61%
Y RADIAL	5837.2	105.7	%	0.22				0.21%
Ag 328.068†	72.9	0.3058	ug/L	0.20908	0.3058	ppb	0.20908	68.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.2	2.5430	ug/L	5.67713	2.5430	ppb	5.67713	223.24%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	39.6	16.257	ug/L	3.7051	16.257	ppb	3.7051	22.79%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	822.8	18.894	ug/L	0.6147	18.894	ppb	0.6147	3.25%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	23.8	0.1931	ug/L	0.11070	0.1931	ppb	0.11070	57.32%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	423.5	0.1549	ug/L	0.09672	0.1549	ppb	0.09672	62.43%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.2	5.2748	ug/L	4.79616	5.2748	ppb	4.79616	90.93%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              43.5      0.4908 ug/L       0.05762      0.4908 ppb        0.05762  11.74%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               8.9      0.1894 ug/L       0.15988      0.1894 ppb        0.15988  84.40%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              21.1      0.2250 ug/L       0.03053      0.2250 ppb        0.03053  13.57%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -87.5     -0.2465 ug/L       1.11717     -0.2465 ppb        1.11717 453.24%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -2.4     -22.648 ug/L       14.5422     -22.648 ppb        14.5422  64.21%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       231.2      41.746 ug/L        7.9767      41.746 ppb         7.9767  19.11%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.5      56.559 ug/L       71.7871      56.559 ppb        71.7871 126.92%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              29.6      0.0287 ug/L       0.03964      0.0287 ppb        0.03964 138.03%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               3.2      0.2160 ug/L       0.04869      0.2160 ppb        0.04869  22.54%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -1.0     -0.3006 ug/L       6.83666     -0.3006 ppb        6.83666 >999.9%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              14.8      0.3590 ug/L       0.11363      0.3590 ppb        0.11363  31.65%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -13.0     -7.0723 ug/L       3.22239     -7.0723 ppb        3.22239  45.56%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              24.0      2.8892 ug/L       1.03014      2.8892 ppb        1.03014  35.65%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          2.0      2.7465 ug/L       6.01728      2.7465 ppb        6.01728 219.09%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              30.0      9.6626 ug/L       1.90047      9.6626 ppb        1.90047  19.67%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              11.4      6.1594 ug/L       2.89561      6.1594 ppb        2.89561  47.01%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             116.6      3.5584 ug/L       0.65988      3.5584 ppb        0.65988  18.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              13.3      2.4088 ug/L       0.46077      2.4088 ppb        0.46077  19.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              11.6      0.0715 ug/L       0.04025      0.0715 ppb        0.04025  56.26%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             114.0      0.1703 ug/L       0.07697      0.1703 ppb        0.07697  45.19%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              14.8      4.7939 ug/L       1.06222      4.7939 ppb        1.06222  22.16%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -121.5     -3.1009 ug/L       1.66610     -3.1009 ppb        1.66610  53.73%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               54.3      0.3549 ug/L       0.19530      0.3549 ppb        0.19530  55.04%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             138.6      1.2659 ug/L       0.48759      1.2659 ppb        0.48759  38.52%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   151.6      9.8841 ug/L       1.28924      9.8841 ppb        1.28924  13.04%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 15
Sample ID: LR1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 1/29/2010 19:02:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5515.6	5515.6	105	%			19:04:26
1	Y RADIAL	5814.6	5814.6	105.3	%			19:04:26
1	Al 396.153Radial†	-136.9	-24.0	-18.100	ug/L	-18.100	ppb	19:04:46
1	Ca 317.933Radial†	16.2	-5.2	-8.6218	ug/L	-8.6218	ppb	19:04:46
1	Fe 238.204 Radial†	41979.4	40135.2	384850	ug/L	384850	ppb	19:04:26
1	K 766.490 Radial†	2465.8	-303.1	-54.689	ug/L	-54.689	ppb	19:04:26
1	Mg 279.077 IEC†	12.6	10.7	5.5910	ug/L	5.5910	ppb	19:04:46
1	Na 589.592 Radial†	-559.4	52.7	16.048	ug/L	16.048	ppb	19:04:26
1	Sr 421.552†	140.5	67.6	0.4165	ug/L	0.4165	ppb	19:04:26
1	Sc 361.383	981491.3	981491.3	98.942	%			19:05:44
1	Y 371.029	846607.0	846607.0	98.447	%			19:05:44
1	Ag 328.068†	-28016.6	-28690.7	3.0678	ug/L	3.0678	ppb	19:05:44
1	As 188.979†	-197.2	-162.8	23.286	ug/L	23.286	ppb	19:06:04
1	B 249.677†	2859.8	3231.4	11.680	ug/L	11.680	ppb	19:05:44
1	Ba 233.527†	-1980.1	-1984.9	-4.2572	ug/L	-4.2572	ppb	19:05:44
1	Be 313.107†	-4492.5	261.9	0.0958	ug/L	0.0958	ppb	19:05:44
1	Cd 226.502†	3484.8	3705.6	1.8736	ug/L	1.8736	ppb	19:05:44
1	Co 228.616†	207.4	278.7	0.2657	ug/L	0.2657	ppb	19:06:04
1	Cr 267.716†	-518.7	-593.5	1.2596	ug/L	1.2596	ppb	19:05:44
1	Cu 324.752†	2258.1	-6687.8	1.4538	ug/L	1.4538	ppb	19:05:44
1	Mn 257.610†	-36556.0	-37517.0	-4.1707	ug/L	-4.1707	ppb	19:05:44
1	Mo 202.031†	-362.6	-377.0	3.9848	ug/L	3.9848	ppb	19:05:44
1	Ni 231.604†	153.2	74.4	1.7976	ug/L	1.7976	ppb	19:06:04
1	P 214.914†	752.1	511.5	-23.543	ug/L	-23.543	ppb	19:06:04
1	Pb 220.353†	268.9	316.9	1.2711	ug/L	1.2711	ppb	19:06:04
1	S 181.975 Axial†	57.6	15.5	20.814	ug/L	20.814	ppb	19:06:04
1	Sb 206.836†	20.7	-13.9	4.8132	ug/L	4.8132	ppb	19:06:04
1	Se 196.026†	-1931.2	-1928.1	216.26	ug/L	216.26	ppb	19:06:04
1	Si 251.611†	-611.2	-1021.3	-30.880	ug/L	-30.880	ppb	19:05:44
1	Sn 189.927†	-13.6	-14.8	3.7813	ug/L	3.7813	ppb	19:06:04
1	Ti 334.940†	-935.7	69.0	0.0450	ug/L	0.0450	ppb	19:05:44
1	Tl 190.801†	-39.1	5.5	1.4514	ug/L	1.4514	ppb	19:06:04
1	U 409.014†	-350.3	2439.7	18.425	ug/L	18.425	ppb	19:05:44
1	V 292.402†	7682.2	9230.6	3.7745	ug/L	3.7745	ppb	19:05:44
1	Zn 213.857†	5023.7	4156.6	0.6250	ug/L	0.6250	ppb	19:06:04
1	SiO2†	-654.2	-1058.9	-68.356	ug/L	-68.356	ppb	19:07:01
2	Sc Radial	5535.7	5535.7	105	%			19:04:51
2	Y RADIAL	5834.5	5834.5	105.6	%			19:04:51
2	Al 396.153Radial†	-148.9	-34.9	-27.026	ug/L	-27.026	ppb	19:05:11
2	Ca 317.933Radial†	16.8	-4.7	-7.8028	ug/L	-7.8028	ppb	19:05:11
2	Fe 238.204 Radial†	41939.4	39951.3	383080	ug/L	383080	ppb	19:04:51
2	K 766.490 Radial†	2465.3	-312.2	-56.322	ug/L	-56.322	ppb	19:04:51
2	Mg 279.077 IEC†	13.1	11.1	22.027	ug/L	22.027	ppb	19:05:11
2	Na 589.592 Radial†	-634.8	-17.2	-5.2434	ug/L	-5.2434	ppb	19:04:51
2	Sr 421.552†	125.9	53.2	0.3278	ug/L	0.3278	ppb	19:04:51
2	Sc 361.383	968761.6	968761.6	97.659	%			19:06:10
2	Y 371.029	836489.9	836489.9	97.271	%			19:06:10
2	Ag 328.068†	-27674.6	-28712.6	2.4026	ug/L	2.4026	ppb	19:06:10
2	As 188.979†	-210.8	-179.3	16.086	ug/L	16.086	ppb	19:06:30
2	B 249.677†	2810.3	3218.7	11.675	ug/L	11.675	ppb	19:06:10
2	Ba 233.527†	-1925.2	-1954.9	-4.0695	ug/L	-4.0695	ppb	19:06:10
2	Be 313.107†	-4436.5	259.6	0.0944	ug/L	0.0944	ppb	19:06:10
2	Cd 226.502†	3491.1	3758.4	2.6480	ug/L	2.6480	ppb	19:06:10
2	Co 228.616†	200.3	274.2	0.2018	ug/L	0.2018	ppb	19:06:30
2	Cr 267.716†	-577.8	-660.9	0.5126	ug/L	0.5126	ppb	19:06:10
2	Cu 324.752†	2167.4	-6750.8	1.1842	ug/L	1.1842	ppb	19:06:10
2	Mn 257.610†	-36244.8	-37683.9	-4.5330	ug/L	-4.5330	ppb	19:06:10
2	Mo 202.031†	-336.4	-355.1	5.3559	ug/L	5.3559	ppb	19:06:10
2	Ni 231.604†	136.2	59.0	1.4236	ug/L	1.4236	ppb	19:06:30

2	P 214.914†	750.4	519.8	-17.512	ug/L	-17.512	ppb	19:06:30
2	Pb 220.353†	261.9	313.3	1.0086	ug/L	1.0086	ppb	19:06:30
2	S 181.975 Axial†	60.2	18.9	25.334	ug/L	25.334	ppb	19:06:30
2	Sb 206.836†	17.5	-16.9	3.8339	ug/L	3.8339	ppb	19:06:30
2	Se 196.026†	-1945.2	-1968.1	188.55	ug/L	188.55	ppb	19:06:30
2	Si 251.611†	-567.8	-985.1	-29.791	ug/L	-29.791	ppb	19:06:10
2	Sn 189.927†	-13.6	-15.0	3.7207	ug/L	3.7207	ppb	19:06:30
2	Ti 334.940†	-1075.8	-87.0	-0.1912	ug/L	-0.1912	ppb	19:06:10
2	Tl 190.801†	-47.6	-3.7	-1.5518	ug/L	-1.5518	ppb	19:06:30
2	U 409.014†	-441.7	2341.5	16.120	ug/L	16.120	ppb	19:06:10
2	V 292.402†	7455.7	9100.6	3.2031	ug/L	3.2031	ppb	19:06:10
2	Zn 213.857†	5008.4	4207.7	1.2644	ug/L	1.2644	ppb	19:06:30
2	SiO2†	-586.4	-998.2	-64.437	ug/L	-64.437	ppb	19:07:06
3	Sc Radial	5465.5	5465.5	104	%			19:05:16
3	Y RADIAL	5778.6	5778.6	104.6	%			19:05:16
3	Al 396.153Radial†	-140.9	-29.1	-22.133	ug/L	-22.133	ppb	19:05:36
3	Ca 317.933Radial†	13.4	-7.7	-12.896	ug/L	-12.896	ppb	19:05:36
3	Fe 238.204 Radial†	41727.1	40259.6	386040	ug/L	386040	ppb	19:05:16
3	K 766.490 Radial†	2493.8	-254.5	-45.897	ug/L	-45.897	ppb	19:05:16
3	Mg 279.077 IEC†	13.7	11.8	47.196	ug/L	47.196	ppb	19:05:36
3	Na 589.592 Radial†	-587.7	20.5	6.2288	ug/L	6.2288	ppb	19:05:16
3	Sr 421.552†	161.8	89.4	0.5507	ug/L	0.5507	ppb	19:05:16
3	Sc 361.383	971914.8	971914.8	97.977	%			19:06:36
3	Y 371.029	839745.9	839745.9	97.649	%			19:06:36
3	Ag 328.068†	-27746.9	-28694.4	3.4363	ug/L	3.4363	ppb	19:06:36
3	As 188.979†	-208.9	-176.7	17.863	ug/L	17.863	ppb	19:06:56
3	B 249.677†	2704.2	3101.2	8.4957	ug/L	8.4957	ppb	19:06:36
3	Ba 233.527†	-1911.2	-1934.2	-3.8120	ug/L	-3.8120	ppb	19:06:36
3	Be 313.107†	-4405.5	305.9	0.1114	ug/L	0.1114	ppb	19:06:36
3	Cd 226.502†	3451.4	3706.3	1.7577	ug/L	1.7577	ppb	19:06:36
3	Co 228.616†	195.8	268.9	0.0404	ug/L	0.0404	ppb	19:06:56
3	Cr 267.716†	-576.6	-657.7	0.6028	ug/L	0.6028	ppb	19:06:36
3	Cu 324.752†	2208.8	-6715.7	1.4393	ug/L	1.4393	ppb	19:06:36
3	Mn 257.610†	-36343.5	-37664.2	-4.2201	ug/L	-4.2201	ppb	19:06:36
3	Mo 202.031†	-382.4	-400.8	2.4417	ug/L	2.4417	ppb	19:06:36
3	Ni 231.604†	147.7	70.3	1.6971	ug/L	1.6971	ppb	19:06:56
3	P 214.914†	742.5	509.2	-25.767	ug/L	-25.767	ppb	19:06:56
3	Pb 220.353†	286.4	337.4	3.6208	ug/L	3.6208	ppb	19:06:56
3	S 181.975 Axial†	44.6	2.8	3.6998	ug/L	3.6998	ppb	19:06:56
3	Sb 206.836†	32.3	-1.9	8.6543	ug/L	8.6543	ppb	19:06:56
3	Se 196.026†	-1950.9	-1967.5	198.62	ug/L	198.62	ppb	19:06:56
3	Si 251.611†	-507.5	-921.6	-27.814	ug/L	-27.814	ppb	19:06:36
3	Sn 189.927†	-21.2	-22.7	2.3746	ug/L	2.3746	ppb	19:06:56
3	Ti 334.940†	-1059.0	-66.2	-0.1630	ug/L	-0.1630	ppb	19:06:36
3	Tl 190.801†	-37.7	6.6	1.7849	ug/L	1.7849	ppb	19:06:56
3	U 409.014†	-420.5	2364.6	16.373	ug/L	16.373	ppb	19:06:36
3	V 292.402†	7465.6	9086.0	2.6347	ug/L	2.6347	ppb	19:06:36
3	Zn 213.857†	5025.0	4208.0	0.9786	ug/L	0.9786	ppb	19:06:56
3	SiO2†	-609.2	-1019.5	-65.744	ug/L	-65.744	ppb	19:07:11

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	974055.9	98.193	%	0.6683				0.68%
Sc Radial	5505.6	104	%	0.7				0.66%
Y 371.029	840947.6	97.789	%	0.6006				0.61%
Y RADIAL	5809.2	105.2	%	0.51				0.49%
Ag 328.068†	-28699.2	2.9689	ug/L	0.52390	2.9689	ppb	0.52390	17.65%
Al 396.153Radial†	-29.3	-22.420	ug/L	4.4697	-22.420	ppb	4.4697	19.94%
As 188.979†	-172.9	19.078	ug/L	3.7503	19.078	ppb	3.7503	19.66%
B 249.677†	3183.8	10.617	ug/L	1.8368	10.617	ppb	1.8368	17.30%
Ba 233.527†	-1958.0	-4.0462	ug/L	0.22352	-4.0462	ppb	0.22352	5.52%
Be 313.107†	275.8	0.1005	ug/L	0.00943	0.1005	ppb	0.00943	9.38%
Ca 317.933Radial†	-5.9	-9.7736	ug/L	2.73499	-9.7736	ppb	2.73499	27.98%
Cd 226.502†	3723.4	2.0931	ug/L	0.48406	2.0931	ppb	0.48406	23.13%
Co 228.616†	273.9	0.1693	ug/L	0.11612	0.1693	ppb	0.11612	68.60%
Cr 267.716†	-637.4	0.7917	ug/L	0.40772	0.7917	ppb	0.40772	51.50%
Cu 324.752†	-6718.1	1.3591	ug/L	0.15165	1.3591	ppb	0.15165	11.16%
Fe 238.204 Radial†	40115.3	384660	ug/L	1487.3	384660	ppb	1487.3	0.39%
K 766.490 Radial†	-289.9	-52.302	ug/L	5.6075	-52.302	ppb	5.6075	10.72%

Mg 279.077 IEC†	11.2	24.938	ug/L	20.9550	24.938	ppb	20.9550	84.03%
Mn 257.610†	-37621.7	-4.3080	ug/L	0.19649	-4.3080	ppb	0.19649	4.56%
Mo 202.031†	-377.6	3.9275	ug/L	1.45791	3.9275	ppb	1.45791	37.12%
Na 589.592 Radial†	18.6	5.6779	ug/L	10.65657	5.6779	ppb	10.65657	187.69%
Ni 231.604†	67.9	1.6394	ug/L	0.19360	1.6394	ppb	0.19360	11.81%
P 214.914†	513.5	-22.274	ug/L	4.2714	-22.274	ppb	4.2714	19.18%
Pb 220.353†	322.5	1.9669	ug/L	1.43839	1.9669	ppb	1.43839	73.13%
S 181.975 Axial†	12.4	16.616	ug/L	11.4117	16.616	ppb	11.4117	68.68%
Sb 206.836†	-10.9	5.7671	ug/L	2.54783	5.7671	ppb	2.54783	44.18%
Se 196.026†	-1954.6	201.14	ug/L	14.030	201.14	ppb	14.030	6.98%
Si 251.611†	-976.0	-29.495	ug/L	1.5545	-29.495	ppb	1.5545	5.27%
Sn 189.927†	-17.5	3.2922	ug/L	0.79524	3.2922	ppb	0.79524	24.15%
Sr 421.552†	70.1	0.4317	ug/L	0.11220	0.4317	ppb	0.11220	25.99%
Ti 334.940†	-28.1	-0.1031	ug/L	0.12903	-0.1031	ppb	0.12903	125.19%
Tl 190.801†	2.8	0.5615	ug/L	1.83775	0.5615	ppb	1.83775	327.31%
U 409.014†	2382.0	16.972	ug/L	1.2639	16.972	ppb	1.2639	7.45%
V 292.402†	9139.1	3.2041	ug/L	0.56992	3.2041	ppb	0.56992	17.79%
Zn 213.857†	4190.8	0.9560	ug/L	0.32032	0.9560	ppb	0.32032	33.51%
SiO2†	-1025.5	-66.179	ug/L	1.9955	-66.179	ppb	1.9955	3.02%

Sequence No.: 16
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 1/29/2010 19:09:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5543.8	5543.8	105	%			19:11:15
1	Y RADIAL	5796.6	5796.6	105.0	%			19:11:15
1	Al 396.153Radial†	6252.3	6055.7	4867.7	ug/L	4867.7	ppb	19:11:15
1	Ca 317.933Radial†	3193.2	3017.5	5023.1	ug/L	5023.1	ppb	19:11:35
1	Fe 238.204 Radial†	572.0	534.2	5136.9	ug/L	5136.9	ppb	19:11:35
1	K 766.490 Radial†	32174.9	27951.8	5041.0	ug/L	5041.0	ppb	19:11:15
1	Mg 279.077 IEC†	144.3	136.0	5191.0	ug/L	5191.0	ppb	19:11:35
1	Na 589.592 Radial†	33917.3	32858.5	10007	ug/L	10007	ppb	19:11:15
1	Sr 421.552†	85543.1	81323.7	500.86	ug/L	500.86	ppb	19:11:15
1	Sc 361.383	999157.6	999157.6	100.72	%			19:12:32
1	Y 371.029	856193.9	856193.9	99.562	%			19:12:32
1	Ag 328.068†	118960.2	117731.7	502.83	ug/L	502.83	ppb	19:12:37
1	As 188.979†	1189.8	1217.7	504.84	ug/L	504.84	ppb	19:12:57
1	B 249.677†	21831.9	22016.3	503.22	ug/L	503.22	ppb	19:12:37
1	Ba 233.527†	62242.8	61812.4	502.58	ug/L	502.58	ppb	19:12:37
1	Be 313.107†	1400583.5	1395332.6	510.23	ug/L	510.23	ppb	19:12:32
1	Cd 226.502†	44904.4	44765.6	502.59	ug/L	502.59	ppb	19:12:37
1	Co 228.616†	23927.4	23824.8	503.63	ug/L	503.63	ppb	19:12:37
1	Cr 267.716†	47868.3	47455.4	502.73	ug/L	502.73	ppb	19:12:37
1	Cu 324.752†	187027.9	176715.3	498.91	ug/L	498.91	ppb	19:12:37
1	Mn 257.610†	456818.9	452969.8	509.37	ug/L	509.37	ppb	19:12:32
1	Mo 202.031†	7301.1	7238.1	497.52	ug/L	497.52	ppb	19:12:57
1	Ni 231.604†	21043.5	20812.0	503.44	ug/L	503.44	ppb	19:12:37
1	P 214.914†	4740.6	4457.9	2366.6	ug/L	2366.6	ppb	19:12:57
1	Pb 220.353†	4141.3	4156.7	501.36	ug/L	501.36	ppb	19:12:57
1	S 181.975 Axial†	793.8	745.4	1000.1	ug/L	1000.1	ppb	19:12:57
1	Sb 206.836†	1582.6	1536.3	511.44	ug/L	511.44	ppb	19:12:57
1	Se 196.026†	884.4	901.7	512.79	ug/L	512.79	ppb	19:12:57
1	Si 251.611†	82654.0	81657.1	2488.3	ug/L	2488.3	ppb	19:12:37
1	Sn 189.927†	2757.7	2736.8	497.28	ug/L	497.28	ppb	19:12:57
1	Ti 334.940†	325347.6	324027.0	491.32	ug/L	491.32	ppb	19:12:37
1	Tl 190.801†	1504.4	1538.6	501.27	ug/L	501.27	ppb	19:12:57
1	U 409.014†	16957.5	19629.6	499.42	ug/L	499.42	ppb	19:12:37
1	V 292.402†	75926.1	76847.3	506.66	ug/L	506.66	ppb	19:12:37
1	Zn 213.857†	56289.0	54964.1	497.35	ug/L	497.35	ppb	19:12:37
1	SiO2†	82423.7	81434.4	5297.6	ug/L	5297.6	ppb	19:14:05
2	Sc Radial	5453.9	5453.9	103	%			19:11:40
2	Y RADIAL	5692.4	5692.4	103.1	%			19:11:40
2	Al 396.153Radial†	6116.3	6022.2	4840.2	ug/L	4840.2	ppb	19:11:40
2	Ca 317.933Radial†	3126.4	3002.9	4998.8	ug/L	4998.8	ppb	19:12:00
2	Fe 238.204 Radial†	557.9	529.5	5092.7	ug/L	5092.7	ppb	19:12:00
2	K 766.490 Radial†	31676.8	27974.6	5045.1	ug/L	5045.1	ppb	19:11:40
2	Mg 279.077 IEC†	141.9	135.9	5187.0	ug/L	5187.0	ppb	19:12:00
2	Na 589.592 Radial†	33363.3	32854.5	10006	ug/L	10006	ppb	19:11:40
2	Sr 421.552†	83960.8	81134.8	499.70	ug/L	499.70	ppb	19:11:40
2	Sc 361.383	984901.0	984901.0	99.286	%			19:13:03
2	Y 371.029	845375.3	845375.3	98.304	%			19:13:03
2	Ag 328.068†	119244.1	119727.4	511.31	ug/L	511.31	ppb	19:13:08
2	As 188.979†	1193.5	1238.6	513.44	ug/L	513.44	ppb	19:13:28
2	B 249.677†	21881.9	22380.4	511.57	ug/L	511.57	ppb	19:13:08
2	Ba 233.527†	62357.1	62822.1	510.79	ug/L	510.79	ppb	19:13:08
2	Be 313.107†	1379603.3	1394329.7	509.88	ug/L	509.88	ppb	19:13:03
2	Cd 226.502†	44881.1	45387.5	509.59	ug/L	509.59	ppb	19:13:08
2	Co 228.616†	23917.0	24158.1	510.68	ug/L	510.68	ppb	19:13:08
2	Cr 267.716†	47885.1	48160.3	510.20	ug/L	510.20	ppb	19:13:08
2	Cu 324.752†	187490.9	179869.5	507.81	ug/L	507.81	ppb	19:13:08
2	Mn 257.610†	449759.8	452424.9	508.75	ug/L	508.75	ppb	19:13:03
2	Mo 202.031†	7326.4	7368.6	506.47	ug/L	506.47	ppb	19:13:28
2	Ni 231.604†	21077.2	21148.4	511.58	ug/L	511.58	ppb	19:13:08

2	P 214.914†	4763.0	4548.5	2415.0	ug/L	2415.0 ppb	19:13:28
2	Pb 220.353†	4134.5	4209.4	507.70	ug/L	507.70 ppb	19:13:28
2	S 181.975 Axial†	793.5	756.5	1015.0	ug/L	1015.0 ppb	19:13:28
2	Sb 206.836†	1594.3	1570.9	522.84	ug/L	522.84 ppb	19:13:28
2	Se 196.026†	895.7	925.9	525.90	ug/L	525.90 ppb	19:13:28
2	Si 251.611†	82822.4	83014.5	2529.6	ug/L	2529.6 ppb	19:13:08
2	Sn 189.927†	2756.7	2775.5	504.29	ug/L	504.29 ppb	19:13:28
2	Ti 334.940†	326377.4	329739.8	499.97	ug/L	499.97 ppb	19:13:08
2	Tl 190.801†	1521.2	1577.2	513.78	ug/L	513.78 ppb	19:13:28
2	U 409.014†	17061.7	19978.2	508.30	ug/L	508.30 ppb	19:13:08
2	V 292.402†	76134.4	78148.3	515.26	ug/L	515.26 ppb	19:13:08
2	Zn 213.857†	56315.4	55799.7	504.91	ug/L	504.91 ppb	19:13:08
2	SiO2†	82553.2	82749.4	5383.2	ug/L	5383.2 ppb	19:14:10
3	Sc Radial	4566.1	4566.1	86.6	%		19:12:05
3	Y RADIAL	4758.4	4758.4	86.16	%		19:12:05
3	Al 396.153Radial†	6149.1	7210.2	5800.1	ug/L	5800.1 ppb	19:12:05
3	Ca 317.933Radial†	3188.6	3662.6	6097.0	ug/L	6097.0 ppb	19:12:25
3	Fe 238.204 Radial†	573.8	652.7	6273.9	ug/L	6273.9 ppb	19:12:25
3	K 766.490 Radial†	31549.1	33783.2	6093.0	ug/L	6093.0 ppb	19:12:05
3	Mg 279.077 IEC†	144.4	165.4	6315.3	ug/L	6315.3 ppb	19:12:25
3	Na 589.592 Radial†	32904.9	38598.3	11755	ug/L	11755 ppb	19:12:05
3	Sr 421.552†	83270.9	96125.1	592.02	ug/L	592.02 ppb	19:12:05
3	Sc 361.383	995079.2	995079.2	100.31	%		19:13:34
3	Y 371.029	853861.4	853861.4	99.291	%		19:13:34
3	Ag 328.068†	119238.5	118493.2	506.43	ug/L	506.43 ppb	19:13:39
3	As 188.979†	1200.1	1232.9	511.34	ug/L	511.34 ppb	19:13:59
3	B 249.677†	21937.6	22210.5	507.49	ug/L	507.49 ppb	19:13:39
3	Ba 233.527†	62293.7	62116.5	505.09	ug/L	505.09 ppb	19:13:39
3	Be 313.107†	1397376.6	1397834.8	511.15	ug/L	511.15 ppb	19:13:34
3	Cd 226.502†	45102.0	45145.3	506.74	ug/L	506.74 ppb	19:13:39
3	Co 228.616†	23919.5	23914.2	505.51	ug/L	505.51 ppb	19:13:39
3	Cr 267.716†	48046.7	47828.1	506.70	ug/L	506.70 ppb	19:13:39
3	Cu 324.752†	187205.7	177653.7	501.62	ug/L	501.62 ppb	19:13:39
3	Mn 257.610†	454633.8	452650.3	509.08	ug/L	509.08 ppb	19:13:34
3	Mo 202.031†	7330.8	7297.4	501.69	ug/L	501.69 ppb	19:13:59
3	Ni 231.604†	21178.1	21031.8	508.76	ug/L	508.76 ppb	19:13:39
3	P 214.914†	4758.9	4495.5	2386.2	ug/L	2386.2 ppb	19:13:59
3	Pb 220.353†	4164.7	4196.9	506.30	ug/L	506.30 ppb	19:13:59
3	S 181.975 Axial†	802.5	757.2	1015.9	ug/L	1015.9 ppb	19:13:59
3	Sb 206.836†	1591.7	1551.9	516.57	ug/L	516.57 ppb	19:13:59
3	Se 196.026†	891.4	912.3	522.42	ug/L	522.42 ppb	19:13:59
3	Si 251.611†	82801.2	82140.1	2503.0	ug/L	2503.0 ppb	19:13:39
3	Sn 189.927†	2762.2	2752.5	500.32	ug/L	500.32 ppb	19:13:59
3	Ti 334.940†	325994.5	325995.7	494.35	ug/L	494.35 ppb	19:13:39
3	Tl 190.801†	1528.2	1568.5	510.94	ug/L	510.94 ppb	19:13:59
3	U 409.014†	17042.7	19783.5	503.21	ug/L	503.21 ppb	19:13:39
3	V 292.402†	76324.8	77553.8	511.17	ug/L	511.17 ppb	19:13:39
3	Zn 213.857†	56568.0	55471.4	501.83	ug/L	501.83 ppb	19:13:39
3	SiO2†	81777.9	81126.0	5277.4	ug/L	5277.4 ppb	19:14:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	993045.9	100.11	%	0.740				0.74%
Sc Radial	5187.9	98.4	%	10.24				10.42%
Y 371.029	851810.2	99.052	%	0.6621				0.67%
Y RADIAL	5415.8	98.06	%	10.351				10.56%
Ag 328.068†	118650.8	506.86	ug/L	4.257	506.86	ppb	4.257	0.84%
QC value within limits for Ag 328.068 Recovery = 101.37%								
Al 396.153Radial†	6429.3	5169.3	ug/L	546.45	5169.3	ppb	546.45	10.57%
QC value within limits for Al 396.153Radial Recovery = 103.39%								
As 188.979†	1229.7	509.87	ug/L	4.486	509.87	ppb	4.486	0.88%
QC value within limits for As 188.979 Recovery = 101.97%								
B 249.677†	22202.4	507.43	ug/L	4.175	507.43	ppb	4.175	0.82%
QC value within limits for B 249.677 Recovery = 101.49%								
Ba 233.527†	62250.3	506.16	ug/L	4.205	506.16	ppb	4.205	0.83%
QC value within limits for Ba 233.527 Recovery = 101.23%								
Be 313.107†	1395832.4	510.42	ug/L	0.654	510.42	ppb	0.654	0.13%
QC value within limits for Be 313.107 Recovery = 102.08%								
Ca 317.933Radial†	3227.7	5373.0	ug/L	627.15	5373.0	ppb	627.15	11.67%

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   QC value within limits for Ca 317.933Radial  Recovery = 107.46%
Cd 226.502†            45099.5      506.31 ug/L         3.518      506.31 ppb          3.518   0.69%
   QC value within limits for Cd 226.502  Recovery = 101.26%
Co 228.616†            23965.7      506.61 ug/L         3.651      506.61 ppb          3.651   0.72%
   QC value within limits for Co 228.616  Recovery = 101.32%
Cr 267.716†            47814.6      506.54 ug/L         3.735      506.54 ppb          3.735   0.74%
   QC value within limits for Cr 267.716  Recovery = 101.31%
Cu 324.752†           178079.5      502.78 ug/L         4.561      502.78 ppb          4.561   0.91%
   QC value within limits for Cu 324.752  Recovery = 100.56%
Fe 238.204 Radial†       572.1      5501.2 ug/L        669.56      5501.2 ppb         669.56  12.17%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 110.02%
K 766.490 Radial†      29903.2      5393.1 ug/L        606.18      5393.1 ppb         606.18  11.24%
   QC value within limits for K 766.490 Radial  Recovery = 107.86%
Mg 279.077 IEC†          145.8      5564.4 ug/L        650.28      5564.4 ppb         650.28  11.69%
   QC value greater than the upper limit for Mg 279.077 IEC  Recovery = 111.29%
Mn 257.610†           452681.6      509.07 ug/L         0.308      509.07 ppb          0.308   0.06%
   QC value within limits for Mn 257.610  Recovery = 101.81%
Mo 202.031†             7301.4      501.89 ug/L         4.481      501.89 ppb          4.481   0.89%
   QC value within limits for Mo 202.031  Recovery = 100.38%
Na 589.592 Radial†     34770.4       10589 ug/L        1009.6       10589 ppb         1009.6   9.53%
   QC value within limits for Na 589.592 Radial  Recovery = 105.89%
Ni 231.604†            20997.4      507.93 ug/L         4.132      507.93 ppb          4.132   0.81%
   QC value within limits for Ni 231.604  Recovery = 101.59%
P 214.914†              4500.6      2389.3 ug/L        24.36      2389.3 ppb         24.36   1.02%
   QC value within limits for P 214.914  Recovery = 95.57%
Pb 220.353†             4187.7      505.12 ug/L         3.332      505.12 ppb          3.332   0.66%
   QC value within limits for Pb 220.353  Recovery = 101.02%
S 181.975 Axial†         753.0      1010.3 ug/L         8.84      1010.3 ppb          8.84   0.88%
   QC value within limits for S 181.975 Axial  Recovery = 101.03%
Sb 206.836†             1553.0      516.95 ug/L         5.708      516.95 ppb          5.708   1.10%
   QC value within limits for Sb 206.836  Recovery = 103.39%
Se 196.026†              913.3      520.37 ug/L         6.794      520.37 ppb          6.794   1.31%
   QC value within limits for Se 196.026  Recovery = 104.07%
Si 251.611†            82270.6      2507.0 ug/L        20.96      2507.0 ppb         20.96   0.84%
   QC value within limits for Si 251.611  Recovery = 100.28%
Sn 189.927†             2754.9      500.63 ug/L         3.516      500.63 ppb          3.516   0.70%
   QC value within limits for Sn 189.927  Recovery = 100.13%
Sr 421.552†            86194.5      530.86 ug/L        52.969      530.86 ppb         52.969   9.98%
   QC value within limits for Sr 421.552  Recovery = 106.17%
Ti 334.940†           326587.5      495.22 ug/L         4.392      495.22 ppb          4.392   0.89%
   QC value within limits for Ti 334.940  Recovery = 99.04%
Tl 190.801†             1561.4      508.67 ug/L         6.559      508.67 ppb          6.559   1.29%
   QC value within limits for Tl 190.801  Recovery = 101.73%
U 409.014†             19797.1      503.64 ug/L         4.460      503.64 ppb          4.460   0.89%
   QC value within limits for U 409.014  Recovery = 100.73%
V 292.402†             77516.5      511.03 ug/L         4.303      511.03 ppb          4.303   0.84%
   QC value within limits for V 292.402  Recovery = 102.21%
Zn 213.857†            55411.7      501.36 ug/L         3.805      501.36 ppb          3.805   0.76%
   QC value within limits for Zn 213.857  Recovery = 100.27%
SiO2†                  81769.9      5319.4 ug/L        56.13      5319.4 ppb         56.13   1.06%
   QC value within limits for SiO2  Recovery = 99.47%
QC Failed.  Continue with analysis.
```

Sequence No.: 17
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 1/29/2010 19:16:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5541.9	5541.9	105	%			19:18:18
1	Y RADIAL	5814.3	5814.3	105.3	%			19:18:18
1	Al 396.153Radial†	-109.5	2.7	2.1350	ug/L	2.1350	ppb	19:18:38
1	Ca 317.933Radial†	23.3	1.5	2.4358	ug/L	2.4358	ppb	19:18:38
1	Fe 238.204 Radial†	8.9	-1.6	-15.701	ug/L	-15.701	ppb	19:18:38
1	K 766.490 Radial†	2847.1	48.6	8.7934	ug/L	8.7934	ppb	19:18:18
1	Mg 279.077 IEC†	0.8	-0.6	-22.295	ug/L	-22.295	ppb	19:18:38
1	Na 589.592 Radial†	-726.1	-103.5	-31.512	ug/L	-31.512	ppb	19:18:18
1	Sr 421.552†	71.9	1.7	0.0104	ug/L	0.0104	ppb	19:18:18
1	Sc 361.383	978016.0	978016.0	98.592	%			19:19:35
1	Y 371.029	849275.6	849275.6	98.758	%			19:19:35
1	Ag 328.068†	386.1	17.1	0.0684	ug/L	0.0684	ppb	19:19:40
1	As 188.979†	-27.4	8.7	3.5608	ug/L	3.5608	ppb	19:20:00
1	B 249.677†	175.9	519.5	11.931	ug/L	11.931	ppb	19:20:00
1	Ba 233.527†	-3.3	13.1	0.1060	ug/L	0.1060	ppb	19:20:00
1	Be 313.107†	-4550.6	186.9	0.0682	ug/L	0.0682	ppb	19:19:40
1	Cd 226.502†	-179.8	1.2	0.0147	ug/L	0.0147	ppb	19:20:00
1	Co 228.616†	-68.9	-0.9	-0.0168	ug/L	-0.0168	ppb	19:20:00
1	Cr 267.716†	73.4	5.1	0.0545	ug/L	0.0545	ppb	19:20:00
1	Cu 324.752†	8995.2	153.5	0.4328	ug/L	0.4328	ppb	19:19:40
1	Mn 257.610†	592.1	30.4	0.0335	ug/L	0.0335	ppb	19:20:00
1	Mo 202.031†	17.6	7.2	0.4955	ug/L	0.4955	ppb	19:20:00
1	Ni 231.604†	91.6	12.5	0.3026	ug/L	0.3026	ppb	19:20:00
1	P 214.914†	237.8	-7.5	-4.2047	ug/L	-4.2047	ppb	19:20:00
1	Pb 220.353†	-18.2	26.7	3.2148	ug/L	3.2148	ppb	19:20:00
1	S 181.975 Axial†	41.4	-0.8	-1.0240	ug/L	-1.0240	ppb	19:20:00
1	Sb 206.836†	39.0	4.7	1.5561	ug/L	1.5561	ppb	19:20:00
1	Se 196.026†	-16.0	7.4	4.0309	ug/L	4.0309	ppb	19:20:00
1	Si 251.611†	464.5	67.5	2.0551	ug/L	2.0551	ppb	19:20:00
1	Sn 189.927†	10.6	9.6	1.7498	ug/L	1.7498	ppb	19:20:00
1	Ti 334.940†	-988.6	11.9	0.0203	ug/L	0.0203	ppb	19:19:40
1	Tl 190.801†	-47.6	-3.3	-1.0624	ug/L	-1.0624	ppb	19:20:00
1	U 409.014†	-2764.4	-10.1	-0.2552	ug/L	-0.2552	ppb	19:19:35
1	V 292.402†	-1416.9	29.1	0.1978	ug/L	0.1978	ppb	19:19:40
1	Zn 213.857†	990.4	83.7	0.7633	ug/L	0.7633	ppb	19:20:00
1	SiO2†	468.5	77.5	5.0435	ug/L	5.0435	ppb	19:21:21
2	Sc Radial	5675.1	5675.1	108	%			19:18:43
2	Y RADIAL	5949.4	5949.4	107.7	%			19:18:43
2	Al 396.153Radial†	-122.0	-6.5	-5.2290	ug/L	-5.2290	ppb	19:19:03
2	Ca 317.933Radial†	23.1	0.8	1.3128	ug/L	1.3128	ppb	19:19:03
2	Fe 238.204 Radial†	6.8	-3.7	-35.722	ug/L	-35.722	ppb	19:19:03
2	K 766.490 Radial†	2900.0	34.2	6.1746	ug/L	6.1746	ppb	19:18:43
2	Mg 279.077 IEC†	0.5	-0.9	-32.521	ug/L	-32.521	ppb	19:19:03
2	Na 589.592 Radial†	-684.6	-48.7	-14.831	ug/L	-14.831	ppb	19:18:43
2	Sr 421.552†	54.9	-15.7	-0.0967	ug/L	-0.0967	ppb	19:18:43
2	Sc 361.383	990539.1	990539.1	99.854	%			19:20:05
2	Y 371.029	860589.5	860589.5	100.07	%			19:20:05
2	Ag 328.068†	445.6	71.8	0.2968	ug/L	0.2968	ppb	19:20:10
2	As 188.979†	-29.0	7.5	3.0669	ug/L	3.0669	ppb	19:20:30
2	B 249.677†	173.0	514.4	11.816	ug/L	11.816	ppb	19:20:30
2	Ba 233.527†	20.2	36.7	0.2967	ug/L	0.2967	ppb	19:20:30
2	Be 313.107†	-4480.0	315.9	0.1156	ug/L	0.1156	ppb	19:20:10
2	Cd 226.502†	-165.8	17.5	0.1996	ug/L	0.1996	ppb	19:20:30
2	Co 228.616†	-73.4	-4.4	-0.0934	ug/L	-0.0934	ppb	19:20:30
2	Cr 267.716†	82.0	12.9	0.1371	ug/L	0.1371	ppb	19:20:30
2	Cu 324.752†	8883.2	-73.9	-0.2084	ug/L	-0.2084	ppb	19:20:10
2	Mn 257.610†	574.6	5.3	0.0037	ug/L	0.0037	ppb	19:20:30
2	Mo 202.031†	8.3	-2.3	-0.1585	ug/L	-0.1585	ppb	19:20:30
2	Ni 231.604†	94.9	14.6	0.3539	ug/L	0.3539	ppb	19:20:30

2	P 214.914†	239.1	-9.2	-5.0196 ug/L	-5.0196 ppb	19:20:30
2	Pb 220.353†	-17.5	27.7	3.3269 ug/L	3.3269 ppb	19:20:30
2	S 181.975 Axial†	48.1	5.4	7.2741 ug/L	7.2741 ppb	19:20:30
2	Sb 206.836†	47.8	13.0	4.1906 ug/L	4.1906 ppb	19:20:30
2	Se 196.026†	-15.0	8.7	4.6462 ug/L	4.6462 ppb	19:20:30
2	Si 251.611†	459.5	56.5	1.7292 ug/L	1.7292 ppb	19:20:30
2	Sn 189.927†	3.6	2.5	0.4442 ug/L	0.4442 ppb	19:20:30
2	Ti 334.940†	-921.4	91.9	0.1438 ug/L	0.1438 ppb	19:20:10
2	Tl 190.801†	-38.6	6.4	2.0799 ug/L	2.0799 ppb	19:20:30
2	U 409.014†	-2939.9	-150.4	-3.8361 ug/L	-3.8361 ppb	19:20:05
2	V 292.402†	-1438.0	26.1	0.1648 ug/L	0.1648 ppb	19:20:10
2	Zn 213.857†	989.6	70.3	0.6430 ug/L	0.6430 ppb	19:20:30
2	SiO2†	482.8	85.8	5.6013 ug/L	5.6013 ppb	19:21:41
3	Sc Radial	5644.9	5644.9	107 %		19:19:08
3	Y RADIAL	5923.3	5923.3	107.2 %		19:19:08
3	Al 396.153Radial†	-117.9	-3.3	-2.6307 ug/L	-2.6307 ppb	19:19:28
3	Ca 317.933Radial†	23.1	0.9	1.4199 ug/L	1.4199 ppb	19:19:28
3	Fe 238.204 Radial†	11.5	0.7	6.8092 ug/L	6.8092 ppb	19:19:28
3	K 766.490 Radial†	2807.7	-37.6	-6.7873 ug/L	-6.7873 ppb	19:19:08
3	Mg 279.077 IEC†	1.2	-0.3	-9.6432 ug/L	-9.6432 ppb	19:19:28
3	Na 589.592 Radial†	-694.5	-61.3	-18.671 ug/L	-18.671 ppb	19:19:08
3	Sr 421.552†	100.7	27.3	0.1684 ug/L	0.1684 ppb	19:19:08
3	Sc 361.383	998143.6	998143.6	100.62 %		19:20:36
3	Y 371.029	866314.2	866314.2	100.74 %		19:20:36
3	Ag 328.068†	425.6	48.5	0.2104 ug/L	0.2104 ppb	19:20:41
3	As 188.979†	-21.5	15.1	6.2138 ug/L	6.2138 ppb	19:21:01
3	B 249.677†	145.8	486.0	11.157 ug/L	11.157 ppb	19:21:01
3	Ba 233.527†	2.5	18.8	0.1528 ug/L	0.1528 ppb	19:21:01
3	Be 313.107†	-4551.3	279.2	0.1022 ug/L	0.1022 ppb	19:20:41
3	Cd 226.502†	-169.3	15.3	0.1708 ug/L	0.1708 ppb	19:21:01
3	Co 228.616†	-73.2	-3.7	-0.0784 ug/L	-0.0784 ppb	19:21:01
3	Cr 267.716†	83.1	13.3	0.1426 ug/L	0.1426 ppb	19:21:01
3	Cu 324.752†	8920.4	-104.7	-0.2932 ug/L	-0.2932 ppb	19:20:41
3	Mn 257.610†	564.5	-9.1	-0.0092 ug/L	-0.0092 ppb	19:21:01
3	Mo 202.031†	9.1	-1.6	-0.1063 ug/L	-0.1063 ppb	19:21:01
3	Ni 231.604†	83.4	2.4	0.0584 ug/L	0.0584 ppb	19:21:01
3	P 214.914†	248.8	-1.4	-0.6885 ug/L	-0.6885 ppb	19:21:01
3	Pb 220.353†	-8.1	37.1	4.4571 ug/L	4.4571 ppb	19:21:01
3	S 181.975 Axial†	37.3	-5.7	-7.6849 ug/L	-7.6849 ppb	19:21:01
3	Sb 206.836†	37.0	1.9	0.6343 ug/L	0.6343 ppb	19:21:01
3	Se 196.026†	-28.6	-4.7	-2.5432 ug/L	-2.5432 ppb	19:21:01
3	Si 251.611†	473.5	66.9	2.0464 ug/L	2.0464 ppb	19:21:01
3	Sn 189.927†	14.8	13.6	2.4683 ug/L	2.4683 ppb	19:21:01
3	Ti 334.940†	-923.4	97.0	0.1496 ug/L	0.1496 ppb	19:20:41
3	Tl 190.801†	-45.1	0.2	0.0644 ug/L	0.0644 ppb	19:21:01
3	U 409.014†	-2958.0	-145.9	-3.7259 ug/L	-3.7259 ppb	19:20:36
3	V 292.402†	-1493.3	-17.8	-0.1262 ug/L	-0.1262 ppb	19:20:41
3	Zn 213.857†	1002.1	75.2	0.6855 ug/L	0.6855 ppb	19:21:01
3	SiO2†	568.8	167.6	10.931 ug/L	10.931 ppb	19:22:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	988899.6	99.689	%	1.0246				1.03%
Sc Radial	5620.6	107	%	1.3				1.24%
Y 371.029	858726.5	99.857	%	1.0083				1.01%
Y RADIAL	5895.7	106.7	%	1.30				1.22%
Ag 328.068†	45.8	0.1919	ug/L	0.11535	0.1919	ppb	0.11535	60.11%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-2.4	-1.9083	ug/L	3.73480	-1.9083	ppb	3.73480	195.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	10.4	4.2805	ug/L	1.69238	4.2805	ppb	1.69238	39.54%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	506.6	11.634	ug/L	0.4177	11.634	ppb	0.4177	3.59%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	22.9	0.1852	ug/L	0.09935	0.1852	ppb	0.09935	53.66%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	260.7	0.0953	ug/L	0.02442	0.0953	ppb	0.02442	25.61%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.0	1.7228	ug/L	0.61980	1.7228	ppb	0.61980	35.98%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              11.3      0.1284 ug/L       0.09947      0.1284 ppb        0.09947  77.48%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -3.0     -0.0629 ug/L       0.04057     -0.0629 ppb        0.04057  64.52%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              10.4      0.1114 ug/L       0.04937      0.1114 ppb        0.04937  44.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -8.4     -0.0229 ug/L       0.39695     -0.0229 ppb        0.39695 >999.9%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.6     -14.871 ug/L       21.2778     -14.871 ppb        21.2778 143.08%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        15.1      2.7269 ug/L       8.34294      2.7269 ppb        8.34294 305.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.6     -21.487 ug/L       11.4605     -21.487 ppb        11.4605  53.34%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               8.8      0.0094 ug/L       0.02192      0.0094 ppb        0.02192 234.27%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.1      0.0769 ug/L       0.36347      0.0769 ppb        0.36347 472.58%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -71.2     -21.671 ug/L        8.7362     -21.671 ppb         8.7362  40.31%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               9.8      0.2383 ug/L       0.15786      0.2383 ppb        0.15786  66.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -6.0     -3.3043 ug/L       2.30169     -3.3043 ppb        2.30169  69.66%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              30.5      3.6663 ug/L       0.68715      3.6663 ppb        0.68715  18.74%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -0.4     -0.4783 ug/L       7.49443     -0.4783 ppb        7.49443 >999.9%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               6.5      2.1270 ug/L       1.84563      2.1270 ppb        1.84563  86.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.8      2.0446 ug/L       3.98509      2.0446 ppb        3.98509 194.91%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              63.7      1.9436 ug/L       0.18570      1.9436 ppb        0.18570   9.55%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               8.6      1.5541 ug/L       1.02611      1.5541 ppb        1.02611  66.03%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               4.4      0.0273 ug/L       0.13338      0.0273 ppb        0.13338 487.78%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              66.9      0.1046 ug/L       0.07304      0.1046 ppb        0.07304  69.83%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.1      0.3607 ug/L       1.59195      0.3607 ppb        1.59195 441.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -102.1     -2.6057 ug/L       2.03636     -2.6057 ppb        2.03636  78.15%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               12.5      0.0788 ug/L       0.17827      0.0788 ppb        0.17827 226.20%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              76.4      0.6972 ug/L       0.06100      0.6972 ppb        0.06100   8.75%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   110.3      7.1919 ug/L       3.25001      7.1919 ppb        3.25001  45.19%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 18
Sample ID: 1202011874|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 1/29/2010 19:24:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011874|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5546.1	5546.1	105	%			19:26:05
1	Y RADIAL	5814.4	5814.4	105.3	%			19:26:05
1	Al 396.153Radial†	-101.6	10.3	8.3216	ug/L	8.3216	ppb	19:26:25
1	Ca 317.933Radial†	34.7	12.3	20.487	ug/L	20.487	ppb	19:26:25
1	Fe 238.204 Radial†	23.5	12.3	117.68	ug/L	117.68	ppb	19:26:25
1	K 766.490 Radial†	2816.2	17.2	3.0863	ug/L	3.0863	ppb	19:26:05
1	Mg 279.077 IEC†	2.6	1.1	43.203	ug/L	43.203	ppb	19:26:25
1	Na 589.592 Radial†	-531.9	81.8	24.907	ug/L	24.907	ppb	19:26:05
1	Sr 421.552†	113.5	41.2	0.2536	ug/L	0.2536	ppb	19:26:05
1	Sc 361.383	983359.7	983359.7	99.130	%			19:27:22
1	Y 371.029	851864.5	851864.5	99.059	%			19:27:22
1	Ag 328.068†	480.4	110.1	0.5096	ug/L	0.5096	ppb	19:27:27
1	As 188.979†	-17.6	18.7	7.7239	ug/L	7.7239	ppb	19:27:47
1	B 249.677†	92.6	434.5	9.9576	ug/L	9.9576	ppb	19:27:47
1	Ba 233.527†	47.1	63.9	0.5232	ug/L	0.5232	ppb	19:27:47
1	Be 313.107†	-4571.6	190.8	0.0704	ug/L	0.0704	ppb	19:27:27
1	Cd 226.502†	-158.6	23.6	0.2520	ug/L	0.2520	ppb	19:27:47
1	Co 228.616†	-84.6	-16.3	-0.3458	ug/L	-0.3458	ppb	19:27:47
1	Cr 267.716†	200.5	132.9	1.4108	ug/L	1.4108	ppb	19:27:47
1	Cu 324.752†	9177.4	287.8	0.8205	ug/L	0.8205	ppb	19:27:27
1	Mn 257.610†	1664.1	1108.6	1.2557	ug/L	1.2557	ppb	19:27:47
1	Mo 202.031†	13.7	3.2	0.2301	ug/L	0.2301	ppb	19:27:47
1	Ni 231.604†	92.3	12.6	0.3056	ug/L	0.3056	ppb	19:27:47
1	P 214.914†	238.9	-7.7	-4.4694	ug/L	-4.4694	ppb	19:27:47
1	Pb 220.353†	-24.6	20.3	2.4355	ug/L	2.4355	ppb	19:27:47
1	S 181.975 Axial†	53.0	10.7	14.408	ug/L	14.408	ppb	19:27:47
1	Sb 206.836†	62.1	27.8	8.9876	ug/L	8.9876	ppb	19:27:47
1	Se 196.026†	-14.8	8.8	5.2087	ug/L	5.2087	ppb	19:27:47
1	Si 251.611†	969.3	574.1	17.536	ug/L	17.536	ppb	19:27:47
1	Sn 189.927†	22.3	21.3	3.8755	ug/L	3.8755	ppb	19:27:47
1	Ti 334.940†	-780.9	227.0	0.3443	ug/L	0.3443	ppb	19:27:27
1	Tl 190.801†	-35.0	9.8	3.1660	ug/L	3.1660	ppb	19:27:47
1	U 409.014†	-2886.8	-118.4	-3.0381	ug/L	-3.0381	ppb	19:27:27
1	V 292.402†	-1373.3	80.9	0.5064	ug/L	0.5064	ppb	19:27:27
1	Zn 213.857†	1005.5	93.5	0.8393	ug/L	0.8393	ppb	19:27:47
1	SiO2†	975.9	586.8	38.266	ug/L	38.266	ppb	19:28:53
2	Sc Radial	5604.6	5604.6	106	%			19:26:31
2	Y RADIAL	5904.9	5904.9	106.9	%			19:26:31
2	Al 396.153Radial†	-104.2	8.8	7.1200	ug/L	7.1200	ppb	19:26:51
2	Ca 317.933Radial†	33.4	10.7	17.840	ug/L	17.840	ppb	19:26:51
2	Fe 238.204 Radial†	25.1	13.5	129.76	ug/L	129.76	ppb	19:26:51
2	K 766.490 Radial†	2865.7	35.8	6.4496	ug/L	6.4496	ppb	19:26:31
2	Mg 279.077 IEC†	2.7	1.2	46.212	ug/L	46.212	ppb	19:26:51
2	Na 589.592 Radial†	-518.8	99.4	30.278	ug/L	30.278	ppb	19:26:31
2	Sr 421.552†	60.7	-9.6	-0.0592	ug/L	-0.0592	ppb	19:26:31
2	Sc 361.383	983041.9	983041.9	99.098	%			19:27:52
2	Y 371.029	850966.8	850966.8	98.954	%			19:27:52
2	Ag 328.068†	445.9	75.4	0.3662	ug/L	0.3662	ppb	19:27:57
2	As 188.979†	-26.3	10.0	4.1327	ug/L	4.1327	ppb	19:28:18
2	B 249.677†	50.5	392.1	8.9809	ug/L	8.9809	ppb	19:28:18
2	Ba 233.527†	43.5	60.3	0.4931	ug/L	0.4931	ppb	19:28:18
2	Be 313.107†	-4475.5	286.2	0.1052	ug/L	0.1052	ppb	19:27:57
2	Cd 226.502†	-140.9	41.4	0.4505	ug/L	0.4505	ppb	19:28:18
2	Co 228.616†	-64.9	3.6	0.0728	ug/L	0.0728	ppb	19:28:18
2	Cr 267.716†	219.7	152.4	1.6176	ug/L	1.6176	ppb	19:28:18
2	Cu 324.752†	8840.0	-49.7	-0.1303	ug/L	-0.1303	ppb	19:27:57
2	Mn 257.610†	1643.4	1088.2	1.2339	ug/L	1.2339	ppb	19:28:18
2	Mo 202.031†	14.6	4.1	0.2934	ug/L	0.2934	ppb	19:28:18
2	Ni 231.604†	105.5	26.0	0.6283	ug/L	0.6283	ppb	19:28:18

2	P 214.914†	243.5	-2.9	-1.6539	ug/L	-1.6539	ppb	19:28:18
2	Pb 220.353†	-20.1	24.9	2.9823	ug/L	2.9823	ppb	19:28:18
2	S 181.975 Axial†	49.5	7.2	9.7183	ug/L	9.7183	ppb	19:28:18
2	Sb 206.836†	48.1	13.7	4.4744	ug/L	4.4744	ppb	19:28:18
2	Se 196.026†	-17.7	5.8	3.6140	ug/L	3.6140	ppb	19:28:18
2	Si 251.611†	962.4	567.5	17.332	ug/L	17.332	ppb	19:28:18
2	Sn 189.927†	24.4	23.6	4.2767	ug/L	4.2767	ppb	19:28:18
2	Ti 334.940†	-786.4	221.1	0.3358	ug/L	0.3358	ppb	19:27:57
2	Tl 190.801†	-41.5	3.1	1.0217	ug/L	1.0217	ppb	19:28:18
2	U 409.014†	-2983.9	-217.2	-5.5632	ug/L	-5.5632	ppb	19:27:57
2	V 292.402†	-1461.4	-8.5	-0.0806	ug/L	-0.0806	ppb	19:27:57
2	Zn 213.857†	997.1	85.4	0.7629	ug/L	0.7629	ppb	19:28:18
2	SiO2†	1019.1	630.7	41.127	ug/L	41.127	ppb	19:28:58
3	Sc Radial	5579.0	5579.0	106	%			19:26:56
3	Y RADIAL	5845.7	5845.7	105.8	%			19:26:56
3	Al 396.153Radial†	-96.2	16.0	12.921	ug/L	12.921	ppb	19:27:16
3	Ca 317.933Radial†	33.7	11.2	18.629	ug/L	18.629	ppb	19:27:16
3	Fe 238.204 Radial†	25.7	14.2	136.34	ug/L	136.34	ppb	19:27:16
3	K 766.490 Radial†	3022.6	196.5	35.464	ug/L	35.464	ppb	19:26:56
3	Mg 279.077 IEC†	3.8	2.2	83.931	ug/L	83.931	ppb	19:27:16
3	Na 589.592 Radial†	-570.3	48.4	14.746	ug/L	14.746	ppb	19:26:56
3	Sr 421.552†	61.6	-8.5	-0.0524	ug/L	-0.0524	ppb	19:26:56
3	Sc 361.383	989979.1	989979.1	99.798	%			19:28:23
3	Y 371.029	858262.6	858262.6	99.803	%			19:28:23
3	Ag 328.068†	487.7	114.2	0.5346	ug/L	0.5346	ppb	19:28:28
3	As 188.979†	-27.4	9.1	3.7607	ug/L	3.7607	ppb	19:28:48
3	B 249.677†	49.6	390.8	8.9497	ug/L	8.9497	ppb	19:28:48
3	Ba 233.527†	43.3	59.8	0.4897	ug/L	0.4897	ppb	19:28:48
3	Be 313.107†	-4504.2	289.1	0.1064	ug/L	0.1064	ppb	19:28:28
3	Cd 226.502†	-151.7	31.5	0.3391	ug/L	0.3391	ppb	19:28:48
3	Co 228.616†	-63.7	5.2	0.1073	ug/L	0.1073	ppb	19:28:48
3	Cr 267.716†	200.3	131.4	1.3960	ug/L	1.3960	ppb	19:28:48
3	Cu 324.752†	8921.8	-30.3	-0.0752	ug/L	-0.0752	ppb	19:28:28
3	Mn 257.610†	1648.2	1081.4	1.2254	ug/L	1.2254	ppb	19:28:48
3	Mo 202.031†	12.3	1.8	0.1335	ug/L	0.1335	ppb	19:28:48
3	Ni 231.604†	95.8	15.6	0.3768	ug/L	0.3768	ppb	19:28:48
3	P 214.914†	244.4	-3.8	-2.1515	ug/L	-2.1515	ppb	19:28:48
3	Pb 220.353†	-16.9	28.2	3.3805	ug/L	3.3805	ppb	19:28:48
3	S 181.975 Axial†	51.1	8.5	11.355	ug/L	11.355	ppb	19:28:48
3	Sb 206.836†	52.2	17.4	5.6768	ug/L	5.6768	ppb	19:28:48
3	Se 196.026†	-12.4	11.3	6.6298	ug/L	6.6298	ppb	19:28:48
3	Si 251.611†	958.2	556.5	16.999	ug/L	16.999	ppb	19:28:48
3	Sn 189.927†	28.4	27.3	4.9588	ug/L	4.9588	ppb	19:28:48
3	Ti 334.940†	-752.2	260.9	0.3933	ug/L	0.3933	ppb	19:28:28
3	Tl 190.801†	-40.3	4.7	1.5268	ug/L	1.5268	ppb	19:28:48
3	U 409.014†	-3003.8	-216.1	-5.5342	ug/L	-5.5342	ppb	19:28:28
3	V 292.402†	-1396.3	67.1	0.4084	ug/L	0.4084	ppb	19:28:28
3	Zn 213.857†	998.5	79.7	0.7124	ug/L	0.7124	ppb	19:28:48
3	SiO2†	1008.3	612.6	39.952	ug/L	39.952	ppb	19:29:03

Mean Data: 1202011874|940165|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	985460.3	99.342	%	0.3948				0.40%
Sc Radial	5576.6	106	%	0.6				0.53%
Y 371.029	853698.0	99.272	%	0.4626				0.47%
Y RADIAL	5855.0	106.0	%	0.83				0.78%
Ag 328.068†	99.9	0.4701	ug/L	0.09089	0.4701	ppb	0.09089	19.33%
Al 396.153Radial†	11.7	9.4541	ug/L	3.06177	9.4541	ppb	3.06177	32.39%
As 188.979†	12.6	5.2057	ug/L	2.18868	5.2057	ppb	2.18868	42.04%
B 249.677†	405.8	9.2961	ug/L	0.57312	9.2961	ppb	0.57312	6.17%
Ba 233.527†	61.3	0.5020	ug/L	0.01841	0.5020	ppb	0.01841	3.67%
Be 313.107†	255.4	0.0940	ug/L	0.02045	0.0940	ppb	0.02045	21.75%
Ca 317.933Radial†	11.4	18.986	ug/L	1.3591	18.986	ppb	1.3591	7.16%
Cd 226.502†	32.1	0.3472	ug/L	0.09950	0.3472	ppb	0.09950	28.66%
Co 228.616†	-2.5	-0.0553	ug/L	0.25222	-0.0553	ppb	0.25222	456.39%
Cr 267.716†	138.9	1.4748	ug/L	0.12388	1.4748	ppb	0.12388	8.40%
Cu 324.752†	69.3	0.2050	ug/L	0.53371	0.2050	ppb	0.53371	260.33%
Fe 238.204 Radial†	13.3	127.93	ug/L	9.464	127.93	ppb	9.464	7.40%
K 766.490 Radial†	83.2	15.000	ug/L	17.8021	15.000	ppb	17.8021	118.68%

Mg 279.077 IEC†	1.5	57.782	ug/L	22.6956	57.782	ppb	22.6956	39.28%
Mn 257.610†	1092.7	1.2383	ug/L	0.01566	1.2383	ppb	0.01566	1.26%
Mo 202.031†	3.0	0.2190	ug/L	0.08052	0.2190	ppb	0.08052	36.76%
Na 589.592 Radial†	76.5	23.310	ug/L	7.8883	23.310	ppb	7.8883	33.84%
Ni 231.604†	18.0	0.4369	ug/L	0.16954	0.4369	ppb	0.16954	38.80%
P 214.914†	-4.8	-2.7582	ug/L	1.50265	-2.7582	ppb	1.50265	54.48%
Pb 220.353†	24.5	2.9327	ug/L	0.47445	2.9327	ppb	0.47445	16.18%
S 181.975 Axial†	8.8	11.827	ug/L	2.3804	11.827	ppb	2.3804	20.13%
Sb 206.836†	19.6	6.3796	ug/L	2.33721	6.3796	ppb	2.33721	36.64%
Se 196.026†	8.6	5.1508	ug/L	1.50871	5.1508	ppb	1.50871	29.29%
Si 251.611†	566.1	17.289	ug/L	0.2711	17.289	ppb	0.2711	1.57%
Sn 189.927†	24.1	4.3703	ug/L	0.54767	4.3703	ppb	0.54767	12.53%
Sr 421.552†	7.7	0.0473	ug/L	0.17870	0.0473	ppb	0.17870	377.46%
Ti 334.940†	236.3	0.3578	ug/L	0.03107	0.3578	ppb	0.03107	8.68%
Tl 190.801†	5.9	1.9048	ug/L	1.12099	1.9048	ppb	1.12099	58.85%
U 409.014†	-183.9	-4.7118	ug/L	1.44958	-4.7118	ppb	1.44958	30.76%
V 292.402†	46.5	0.2781	ug/L	0.31449	0.2781	ppb	0.31449	113.10%
Zn 213.857†	86.2	0.7715	ug/L	0.06389	0.7715	ppb	0.06389	8.28%
SiO2†	610.0	39.782	ug/L	1.4380	39.782	ppb	1.4380	3.61%

Sequence No.: 19
Sample ID: 244228001|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 1/29/2010 19:31:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228001|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5850.5	5850.5	111	%			19:33:08
1	Y RADIAL	7047.2	7047.2	127.6	%			19:33:08
1	Al 396.153Radial†	63839.3	57662.4	46580	ug/L	46580	ppb	19:33:08
1	Ca 317.933Radial†	9366.1	8423.4	14022	ug/L	14022	ppb	19:33:08
1	Fe 238.204 Radial†	11240.1	10123.6	97074	ug/L	97074	ppb	19:33:08
1	K 766.490 Radial†	53931.0	45961.3	8293.4	ug/L	8293.4	ppb	19:33:08
1	Mg 279.077 IEC†	289.7	259.8	9817.9	ug/L	9817.9	ppb	19:33:28
1	Na 589.592 Radial†	1998.2	2389.1	727.59	ug/L	727.59	ppb	19:33:08
1	Sr 421.552†	17644.3	15840.8	97.464	ug/L	97.464	ppb	19:33:08
1	Sc 361.383	1017883.9	1017883.9	102.61	%			19:34:26
1	Y 371.029	1001048.7	1001048.7	116.41	%			19:34:26
1	Ag 328.068†	-6425.0	-6636.0	3.7136	ug/L	3.7136	ppb	19:34:31
1	As 188.979†	-64.2	-26.1	42.689	ug/L	42.689	ppb	19:34:51
1	B 249.677†	1394.0	1699.6	23.180	ug/L	23.180	ppb	19:34:31
1	Ba 233.527†	77323.7	75372.7	614.51	ug/L	614.51	ppb	19:34:31
1	Be 313.107†	-12325.0	-7208.9	5.4090	ug/L	5.4090	ppb	19:34:31
1	Cd 226.502†	892.3	1053.1	1.8117	ug/L	1.8117	ppb	19:34:51
1	Co 228.616†	1263.8	1300.7	18.920	ug/L	18.920	ppb	19:34:51
1	Cr 267.716†	12150.0	11771.6	126.68	ug/L	126.68	ppb	19:34:31
1	Cu 324.752†	24121.5	14537.7	46.295	ug/L	46.295	ppb	19:34:31
1	Mn 257.610†	2531264.8	2466291.1	2781.0	ug/L	2781.0	ppb	19:34:26
1	Mo 202.031†	79.8	67.2	12.318	ug/L	12.318	ppb	19:34:51
1	Ni 231.604†	3542.9	3372.3	81.608	ug/L	81.608	ppb	19:34:51
1	P 214.914†	2007.0	1707.3	868.82	ug/L	868.82	ppb	19:34:51
1	Pb 220.353†	708.5	735.6	89.369	ug/L	89.369	ppb	19:34:51
1	S 181.975 Axial†	338.5	287.2	376.91	ug/L	376.91	ppb	19:34:51
1	Sb 206.836†	71.8	35.1	1.0862	ug/L	1.0862	ppb	19:34:51
1	Se 196.026†	-492.8	-456.5	73.890	ug/L	73.890	ppb	19:34:51
1	Si 251.611†	1276482.9	1243601.4	37989	ug/L	37989	ppb	19:34:26
1	Sn 189.927†	-59.0	-58.6	-6.8601	ug/L	-6.8601	ppb	19:34:51
1	Ti 334.940†	2394597.8	2334686.2	3542.3	ug/L	3542.3	ppb	19:34:26
1	Tl 190.801†	-187.7	-137.9	-2.3252	ug/L	-2.3252	ppb	19:34:51
1	U 409.014†	-11039.3	-7964.6	-214.67	ug/L	-214.67	ppb	19:34:26
1	V 292.402†	16549.8	17595.0	96.418	ug/L	96.418	ppb	19:34:31
1	Zn 213.857†	45409.3	43333.2	385.56	ug/L	385.56	ppb	19:34:31
1	SiO2†	1269072.5	1236385.6	80637	ug/L	80637	ppb	19:36:00
2	Sc Radial	5857.2	5857.2	111	%			19:33:33
2	Y RADIAL	7065.2	7065.2	127.9	%			19:33:33
2	Al 396.153Radial†	63810.0	57570.3	46505	ug/L	46505	ppb	19:33:33
2	Ca 317.933Radial†	9357.3	8405.9	13993	ug/L	13993	ppb	19:33:33
2	Fe 238.204 Radial†	11182.7	10060.3	96467	ug/L	96467	ppb	19:33:33
2	K 766.490 Radial†	53997.6	45965.7	8294.2	ug/L	8294.2	ppb	19:33:33
2	Mg 279.077 IEC†	291.7	261.3	9876.5	ug/L	9876.5	ppb	19:33:53
2	Na 589.592 Radial†	1951.8	2345.3	714.24	ug/L	714.24	ppb	19:33:33
2	Sr 421.552†	17623.2	15803.6	97.235	ug/L	97.235	ppb	19:33:33
2	Sc 361.383	1024803.4	1024803.4	103.31	%			19:34:57
2	Y 371.029	1009292.4	1009292.4	117.37	%			19:34:57
2	Ag 328.068†	-6376.1	-6546.4	3.9043	ug/L	3.9043	ppb	19:35:02
2	As 188.979†	-55.8	-17.5	46.047	ug/L	46.047	ppb	19:35:22
2	B 249.677†	1315.2	1614.2	21.317	ug/L	21.317	ppb	19:35:02
2	Ba 233.527†	77458.0	74993.9	611.42	ug/L	611.42	ppb	19:35:02
2	Be 313.107†	-12685.4	-7476.7	5.3026	ug/L	5.3026	ppb	19:35:02
2	Cd 226.502†	903.7	1058.3	1.9312	ug/L	1.9312	ppb	19:35:22
2	Co 228.616†	1283.1	1311.1	19.155	ug/L	19.155	ppb	19:35:22
2	Cr 267.716†	12233.6	11772.5	126.68	ug/L	126.68	ppb	19:35:02
2	Cu 324.752†	24363.2	14612.9	46.478	ug/L	46.478	ppb	19:35:02
2	Mn 257.610†	2540478.9	2458554.0	2772.2	ug/L	2772.2	ppb	19:34:57
2	Mo 202.031†	78.9	65.8	12.174	ug/L	12.174	ppb	19:35:22
2	Ni 231.604†	3568.6	3373.9	81.646	ug/L	81.646	ppb	19:35:22

2	P 214.914†	2015.3	1702.1	866.41	ug/L	866.41 ppb	19:35:22
2	Pb 220.353†	715.9	738.1	89.707	ug/L	89.707 ppb	19:35:22
2	S 181.975 Axial†	335.3	281.8	369.76	ug/L	369.76 ppb	19:35:22
2	Sb 206.836†	75.5	38.2	2.0691	ug/L	2.0691 ppb	19:35:22
2	Se 196.026†	-502.6	-462.8	68.429	ug/L	68.429 ppb	19:35:22
2	Si 251.611†	1282389.2	1240919.2	37907	ug/L	37907 ppb	19:34:57
2	Sn 189.927†	-57.1	-56.4	-6.4760	ug/L	-6.4760 ppb	19:35:22
2	Ti 334.940†	2408263.3	2332157.2	3538.4	ug/L	3538.4 ppb	19:34:57
2	Tl 190.801†	-176.8	-126.1	1.4066	ug/L	1.4066 ppb	19:35:22
2	U 409.014†	-11351.0	-8193.7	-220.45	ug/L	-220.45 ppb	19:34:57
2	V 292.402†	16729.0	17659.5	96.919	ug/L	96.919 ppb	19:35:02
2	Zn 213.857†	45403.1	43028.3	382.84	ug/L	382.84 ppb	19:35:02
2	SiO2†	1277686.0	1236372.5	80637	ug/L	80637 ppb	19:36:06
3	Sc Radial	5777.8	5777.8	110	%		19:33:59
3	Y RADIAL	6965.2	6965.2	126.1	%		19:33:59
3	Al 396.153Radial†	63042.8	57660.0	46578	ug/L	46578 ppb	19:33:59
3	Ca 317.933Radial†	9219.8	8396.2	13977	ug/L	13977 ppb	19:33:59
3	Fe 238.204 Radial†	11062.8	10089.4	96746	ug/L	96746 ppb	19:33:59
3	K 766.490 Radial†	53248.5	45950.5	8291.5	ug/L	8291.5 ppb	19:33:59
3	Mg 279.077 IEC†	294.3	267.3	10105	ug/L	10105 ppb	19:34:19
3	Na 589.592 Radial†	1848.0	2274.7	692.75	ug/L	692.75 ppb	19:33:59
3	Sr 421.552†	17351.7	15774.0	97.053	ug/L	97.053 ppb	19:33:59
3	Sc 361.383	1018696.7	1018696.7	102.69	%		19:35:28
3	Y 371.029	1004033.9	1004033.9	116.75	%		19:35:28
3	Ag 328.068†	-6452.9	-6658.3	3.5193	ug/L	3.5193 ppb	19:35:33
3	As 188.979†	-60.1	-22.0	44.304	ug/L	44.304 ppb	19:35:53
3	B 249.677†	1264.2	1572.1	20.305	ug/L	20.305 ppb	19:35:33
3	Ba 233.527†	77776.3	75753.3	617.59	ug/L	617.59 ppb	19:35:33
3	Be 313.107†	-12723.1	-7587.0	5.2728	ug/L	5.2728 ppb	19:35:33
3	Cd 226.502†	894.7	1054.8	1.8641	ug/L	1.8641 ppb	19:35:53
3	Co 228.616†	1285.8	1321.2	19.357	ug/L	19.357 ppb	19:35:53
3	Cr 267.716†	12317.8	11925.6	128.31	ug/L	128.31 ppb	19:35:33
3	Cu 324.752†	24403.6	14793.6	47.000	ug/L	47.000 ppb	19:35:33
3	Mn 257.610†	2529088.2	2462203.5	2776.3	ug/L	2776.3 ppb	19:35:28
3	Mo 202.031†	81.0	68.3	12.369	ug/L	12.369 ppb	19:35:53
3	Ni 231.604†	3556.1	3382.4	81.854	ug/L	81.854 ppb	19:35:53
3	P 214.914†	1999.7	1698.5	864.11	ug/L	864.11 ppb	19:35:53
3	Pb 220.353†	707.4	734.0	89.198	ug/L	89.198 ppb	19:35:53
3	S 181.975 Axial†	335.9	284.3	373.13	ug/L	373.13 ppb	19:35:53
3	Sb 206.836†	79.3	42.3	3.3810	ug/L	3.3810 ppb	19:35:53
3	Se 196.026†	-507.9	-470.8	64.950	ug/L	64.950 ppb	19:35:53
3	Si 251.611†	1277274.2	1243379.5	37982	ug/L	37982 ppb	19:35:28
3	Sn 189.927†	-63.8	-63.3	-7.7242	ug/L	-7.7242 ppb	19:35:53
3	Ti 334.940†	2397020.9	2335183.9	3543.0	ug/L	3543.0 ppb	19:35:28
3	Tl 190.801†	-184.5	-134.6	-1.2852	ug/L	-1.2852 ppb	19:35:53
3	U 409.014†	-11051.4	-7967.8	-214.72	ug/L	-214.72 ppb	19:35:28
3	V 292.402†	16781.7	17807.9	97.857	ug/L	97.857 ppb	19:35:33
3	Zn 213.857†	45615.0	43498.2	387.10	ug/L	387.10 ppb	19:35:33
3	SiO2†	1294813.4	1260464.7	82208	ug/L	82208 ppb	19:36:11

Mean Data: 244228001|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1020461.3	102.87	%	0.381				0.37%
Sc Radial	5828.5	111	%	0.8				0.76%
Y 371.029	1004791.7	116.84	%	0.485				0.42%
Y RADIAL	7025.9	127.2	%	0.97				0.76%
Ag 328.068†	-6613.6	3.7124	ug/L	0.19252	3.7124	ppb	0.19252	5.19%
Al 396.153Radial†	57630.9	46554	ug/L	42.4	46554	ppb	42.4	0.09%
As 188.979†	-21.8	44.347	ug/L	1.6797	44.347	ppb	1.6797	3.79%
B 249.677†	1628.7	21.601	ug/L	1.4583	21.601	ppb	1.4583	6.75%
Ba 233.527†	75373.3	614.51	ug/L	3.085	614.51	ppb	3.085	0.50%
Be 313.107†	-7424.2	5.3282	ug/L	0.07161	5.3282	ppb	0.07161	1.34%
Ca 317.933Radial†	8408.5	13997	ug/L	23.0	13997	ppb	23.0	0.16%
Cd 226.502†	1055.4	1.8690	ug/L	0.05987	1.8690	ppb	0.05987	3.20%
Co 228.616†	1311.0	19.144	ug/L	0.2190	19.144	ppb	0.2190	1.14%
Cr 267.716†	11823.2	127.23	ug/L	0.938	127.23	ppb	0.938	0.74%
Cu 324.752†	14648.0	46.591	ug/L	0.3659	46.591	ppb	0.3659	0.79%
Fe 238.204 Radial†	10091.1	96762	ug/L	303.7	96762	ppb	303.7	0.31%
K 766.490 Radial†	45959.2	8293.1	ug/L	1.41	8293.1	ppb	1.41	0.02%

Mg 279.077 IEC†	262.8	9933.1	ug/L	151.72	9933.1	ppb	151.72	1.53%
Mn 257.610†	2462349.5	2776.5	ug/L	4.38	2776.5	ppb	4.38	0.16%
Mo 202.031†	67.1	12.287	ug/L	0.1014	12.287	ppb	0.1014	0.83%
Na 589.592 Radial†	2336.4	711.53	ug/L	17.578	711.53	ppb	17.578	2.47%
Ni 231.604†	3376.2	81.703	ug/L	0.1321	81.703	ppb	0.1321	0.16%
P 214.914†	1702.7	866.45	ug/L	2.356	866.45	ppb	2.356	0.27%
Pb 220.353†	735.9	89.425	ug/L	0.2589	89.425	ppb	0.2589	0.29%
S 181.975 Axial†	284.4	373.27	ug/L	3.580	373.27	ppb	3.580	0.96%
Sb 206.836†	38.5	2.1788	ug/L	1.15134	2.1788	ppb	1.15134	52.84%
Se 196.026†	-463.4	69.090	ug/L	4.5064	69.090	ppb	4.5064	6.52%
Si 251.611†	1242633.4	37959	ug/L	45.5	37959	ppb	45.5	0.12%
Sn 189.927†	-59.4	-7.0201	ug/L	0.63929	-7.0201	ppb	0.63929	9.11%
Sr 421.552†	15806.2	97.250	ug/L	0.2060	97.250	ppb	0.2060	0.21%
Ti 334.940†	2334009.1	3541.2	ug/L	2.45	3541.2	ppb	2.45	0.07%
Tl 190.801†	-132.9	-0.7346	ug/L	1.92585	-0.7346	ppb	1.92585	262.17%
U 409.014†	-8042.0	-216.62	ug/L	3.323	-216.62	ppb	3.323	1.53%
V 292.402†	17687.4	97.065	ug/L	0.7301	97.065	ppb	0.7301	0.75%
Zn 213.857†	43286.6	385.17	ug/L	2.158	385.17	ppb	2.158	0.56%
SiO2†	1244407.6	81161	ug/L	906.9	81161	ppb	906.9	1.12%

Sequence No.: 20
Sample ID: 244228002|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 1/29/2010 19:38:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228002|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5751.6	5751.6	109	%			19:40:16
1	Y RADIAL	6853.0	6853.0	124.1	%			19:40:16
1	Al 396.153Radial†	50735.8	46635.4	37672	ug/L	37672	ppb	19:40:16
1	Ca 317.933Radial†	7174.1	6558.5	10918	ug/L	10918	ppb	19:40:16
1	Fe 238.204 Radial†	9268.1	8489.5	81404	ug/L	81404	ppb	19:40:16
1	K 766.490 Radial†	42891.7	36673.7	6617.4	ug/L	6617.4	ppb	19:40:16
1	Mg 279.077 IEC†	227.9	207.7	7844.4	ug/L	7844.4	ppb	19:40:36
1	Na 589.592 Radial†	2013.5	2434.1	741.30	ug/L	741.30	ppb	19:40:16
1	Sr 421.552†	14400.8	13139.9	80.851	ug/L	80.851	ppb	19:40:16
1	Sc 361.383	1015834.7	1015834.7	102.40	%			19:41:33
1	Y 371.029	996121.5	996121.5	115.83	%			19:41:33
1	Ag 328.068†	-5268.7	-5519.5	3.2863	ug/L	3.2863	ppb	19:41:39
1	As 188.979†	-53.7	-16.0	38.914	ug/L	38.914	ppb	19:41:59
1	B 249.677†	1005.9	1323.4	17.102	ug/L	17.102	ppb	19:41:39
1	Ba 233.527†	56495.5	55185.5	450.26	ug/L	450.26	ppb	19:41:39
1	Be 313.107†	-12276.3	-7185.6	4.3013	ug/L	4.3013	ppb	19:41:39
1	Cd 226.502†	727.0	893.5	1.6368	ug/L	1.6368	ppb	19:41:59
1	Co 228.616†	1001.6	1047.2	14.758	ug/L	14.758	ppb	19:41:59
1	Cr 267.716†	9012.8	8732.0	94.165	ug/L	94.165	ppb	19:41:39
1	Cu 324.752†	23660.7	14135.1	44.302	ug/L	44.302	ppb	19:41:39
1	Mn 257.610†	2325026.7	2269871.4	2558.7	ug/L	2558.7	ppb	19:41:33
1	Mo 202.031†	102.5	89.5	12.597	ug/L	12.597	ppb	19:41:59
1	Ni 231.604†	2881.4	2733.3	66.145	ug/L	66.145	ppb	19:41:59
1	P 214.914†	1790.0	1499.3	764.50	ug/L	764.50	ppb	19:41:59
1	Pb 220.353†	563.7	595.6	72.076	ug/L	72.076	ppb	19:41:59
1	S 181.975 Axial†	370.1	318.6	420.88	ug/L	420.88	ppb	19:41:59
1	Sb 206.836†	68.7	32.2	1.5387	ug/L	1.5387	ppb	19:41:59
1	Se 196.026†	-425.0	-391.3	57.214	ug/L	57.214	ppb	19:41:59
1	Si 251.611†	1118969.0	1092295.1	33367	ug/L	33367	ppb	19:41:33
1	Sn 189.927†	-67.9	-67.4	-9.1963	ug/L	-9.1963	ppb	19:41:59
1	Ti 334.940†	2057824.9	2010527.4	3050.3	ug/L	3050.3	ppb	19:41:33
1	Tl 190.801†	-170.2	-121.2	-1.9941	ug/L	-1.9941	ppb	19:41:59
1	U 409.014†	-9069.9	-6063.2	-164.27	ug/L	-164.27	ppb	19:41:33
1	V 292.402†	12877.5	14041.4	76.187	ug/L	76.187	ppb	19:41:39
1	Zn 213.857†	38405.2	36582.7	325.56	ug/L	325.56	ppb	19:41:39
1	SiO2†	1113902.5	1087353.4	70918	ug/L	70918	ppb	19:43:07
2	Sc Radial	5787.5	5787.5	110	%			19:40:41
2	Y RADIAL	6970.7	6970.7	126.2	%			19:40:41
2	Al 396.153Radial†	51562.1	47100.2	38048	ug/L	38048	ppb	19:40:41
2	Ca 317.933Radial†	7269.9	6605.0	10995	ug/L	10995	ppb	19:40:41
2	Fe 238.204 Radial†	9385.6	8543.9	81926	ug/L	81926	ppb	19:40:41
2	K 766.490 Radial†	43614.0	37088.3	6692.3	ug/L	6692.3	ppb	19:40:41
2	Mg 279.077 IEC†	227.6	206.1	7781.7	ug/L	7781.7	ppb	19:41:01
2	Na 589.592 Radial†	2054.1	2459.7	749.09	ug/L	749.09	ppb	19:40:41
2	Sr 421.552†	14652.0	13287.0	81.756	ug/L	81.756	ppb	19:40:41
2	Sc 361.383	1015760.1	1015760.1	102.40	%			19:42:04
2	Y 371.029	997445.9	997445.9	115.99	%			19:42:04
2	Ag 328.068†	-5320.7	-5570.7	3.2313	ug/L	3.2313	ppb	19:42:10
2	As 188.979†	-56.4	-18.6	37.871	ug/L	37.871	ppb	19:42:30
2	B 249.677†	879.0	1199.5	14.172	ug/L	14.172	ppb	19:42:10
2	Ba 233.527†	56539.3	55232.4	450.65	ug/L	450.65	ppb	19:42:10
2	Be 313.107†	-12269.7	-7180.1	4.2816	ug/L	4.2816	ppb	19:42:10
2	Cd 226.502†	720.8	887.5	1.5160	ug/L	1.5160	ppb	19:42:30
2	Co 228.616†	1017.0	1062.3	15.090	ug/L	15.090	ppb	19:42:30
2	Cr 267.716†	9019.3	8738.9	94.246	ug/L	94.246	ppb	19:42:10
2	Cu 324.752†	23726.0	14200.6	44.512	ug/L	44.512	ppb	19:42:10
2	Mn 257.610†	2316664.2	2261871.2	2549.8	ug/L	2549.8	ppb	19:42:04
2	Mo 202.031†	107.1	94.0	12.947	ug/L	12.947	ppb	19:42:30
2	Ni 231.604†	2868.5	2720.9	65.846	ug/L	65.846	ppb	19:42:30

2	P 214.914†	1809.2	1518.2	774.59 ug/L	774.59 ppb	19:42:30
2	Pb 220.353†	564.3	596.2	72.178 ug/L	72.178 ppb	19:42:30
2	S 181.975 Axial†	359.6	308.4	407.11 ug/L	407.11 ppb	19:42:30
2	Sb 206.836†	72.0	35.4	2.6830 ug/L	2.6830 ppb	19:42:30
2	Se 196.026†	-424.7	-391.0	59.140 ug/L	59.140 ppb	19:42:30
2	Si 251.611†	1114203.6	1087721.4	33227 ug/L	33227 ppb	19:42:04
2	Sn 189.927†	-46.4	-46.5	-5.3795 ug/L	-5.3795 ppb	19:42:30
2	Ti 334.940†	2051197.0	2004202.2	3040.8 ug/L	3040.8 ppb	19:42:04
2	Tl 190.801†	-166.4	-117.5	-0.9132 ug/L	-0.9132 ppb	19:42:30
2	U 409.014†	-8917.8	-5915.2	-160.56 ug/L	-160.56 ppb	19:42:04
2	V 292.402†	12771.0	13938.3	75.461 ug/L	75.461 ppb	19:42:10
2	Zn 213.857†	38278.9	36462.2	324.42 ug/L	324.42 ppb	19:42:10
2	SiO2†	1111762.5	1085343.4	70786 ug/L	70786 ppb	19:43:13
3	Sc Radial	5755.1	5755.1	109 %		19:41:06
3	Y RADIAL	6954.4	6954.4	125.9 %		19:41:06
3	Al 396.153Radial†	51550.5	47353.8	38252 ug/L	38252 ppb	19:41:06
3	Ca 317.933Radial†	7236.7	6611.8	11006 ug/L	11006 ppb	19:41:06
3	Fe 238.204 Radial†	9393.4	8599.1	82456 ug/L	82456 ppb	19:41:06
3	K 766.490 Radial†	43360.7	37079.7	6690.7 ug/L	6690.7 ppb	19:41:06
3	Mg 279.077 IEC†	237.0	215.9	8155.4 ug/L	8155.4 ppb	19:41:26
3	Na 589.592 Radial†	2021.7	2440.6	743.28 ug/L	743.28 ppb	19:41:06
3	Sr 421.552†	14654.2	13364.1	82.231 ug/L	82.231 ppb	19:41:06
3	Sc 361.383	1017798.5	1017798.5	102.60 %		19:42:36
3	Y 371.029	999264.3	999264.3	116.20 %		19:42:36
3	Ag 328.068†	-5194.4	-5437.2	3.9751 ug/L	3.9751 ppb	19:42:41
3	As 188.979†	-40.9	-3.4	44.276 ug/L	44.276 ppb	19:43:01
3	B 249.677†	1054.8	1369.1	17.981 ug/L	17.981 ppb	19:42:41
3	Ba 233.527†	56764.9	55341.7	451.56 ug/L	451.56 ppb	19:42:41
3	Be 313.107†	-12143.8	-7033.3	4.3420 ug/L	4.3420 ppb	19:42:41
3	Cd 226.502†	740.4	905.2	1.6598 ug/L	1.6598 ppb	19:43:01
3	Co 228.616†	1012.0	1055.4	14.930 ug/L	14.930 ppb	19:43:01
3	Cr 267.716†	9030.2	8732.0	94.185 ug/L	94.185 ppb	19:42:41
3	Cu 324.752†	23836.8	14262.2	44.716 ug/L	44.716 ppb	19:42:41
3	Mn 257.610†	2325422.6	2265876.5	2554.3 ug/L	2554.3 ppb	19:42:36
3	Mo 202.031†	101.9	88.7	12.626 ug/L	12.626 ppb	19:43:01
3	Ni 231.604†	2884.4	2730.8	66.085 ug/L	66.085 ppb	19:43:01
3	P 214.914†	1802.2	1507.8	768.44 ug/L	768.44 ppb	19:43:01
3	Pb 220.353†	540.9	572.4	69.306 ug/L	69.306 ppb	19:43:01
3	S 181.975 Axial†	361.1	309.2	408.13 ug/L	408.13 ppb	19:43:01
3	Sb 206.836†	78.6	41.8	4.6840 ug/L	4.6840 ppb	19:43:01
3	Se 196.026†	-412.6	-378.4	67.812 ug/L	67.812 ppb	19:43:01
3	Si 251.611†	1119768.0	1090965.5	33326 ug/L	33326 ppb	19:42:36
3	Sn 189.927†	-54.3	-54.0	-6.7404 ug/L	-6.7404 ppb	19:43:01
3	Ti 334.940†	2057357.2	2006194.4	3043.7 ug/L	3043.7 ppb	19:42:36
3	Tl 190.801†	-173.5	-124.1	-3.0009 ug/L	-3.0009 ppb	19:43:01
3	U 409.014†	-9035.1	-6012.2	-163.09 ug/L	-163.09 ppb	19:42:36
3	V 292.402†	12940.2	14078.3	76.289 ug/L	76.289 ppb	19:42:41
3	Zn 213.857†	38641.9	36741.1	326.91 ug/L	326.91 ppb	19:42:41
3	SiO2†	1112180.3	1083576.2	70671 ug/L	70671 ppb	19:43:19

Mean Data: 244228002|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1016464.4	102.47	%	0.117				0.11%
Sc Radial	5764.7	109	%	0.4				0.34%
Y 371.029	997610.6	116.01	%	0.183				0.16%
Y RADIAL	6926.0	125.4	%	1.15				0.92%
Ag 328.068†	-5509.1	3.4976	ug/L	0.41449	3.4976	ppb	0.41449	11.85%
Al 396.153Radial†	47029.8	37991	ug/L	294.3	37991	ppb	294.3	0.77%
As 188.979†	-12.6	40.354	ug/L	3.4367	40.354	ppb	3.4367	8.52%
B 249.677†	1297.3	16.418	ug/L	1.9947	16.418	ppb	1.9947	12.15%
Ba 233.527†	55253.2	450.82	ug/L	0.666	450.82	ppb	0.666	0.15%
Be 313.107†	-7133.0	4.3083	ug/L	0.03080	4.3083	ppb	0.03080	0.71%
Ca 317.933Radial†	6591.8	10973	ug/L	48.3	10973	ppb	48.3	0.44%
Cd 226.502†	895.4	1.6042	ug/L	0.07728	1.6042	ppb	0.07728	4.82%
Co 228.616†	1054.9	14.926	ug/L	0.1661	14.926	ppb	0.1661	1.11%
Cr 267.716†	8734.3	94.199	ug/L	0.0422	94.199	ppb	0.0422	0.04%
Cu 324.752†	14199.3	44.510	ug/L	0.2069	44.510	ppb	0.2069	0.46%
Fe 238.204 Radial†	8544.2	81929	ug/L	525.8	81929	ppb	525.8	0.64%
K 766.490 Radial†	36947.2	6666.8	ug/L	42.76	6666.8	ppb	42.76	0.64%

Mg 279.077 IEC†	209.9	7927.2	ug/L	200.12	7927.2	ppb	200.12	2.52%
Mn 257.610†	2265873.0	2554.3	ug/L	4.47	2554.3	ppb	4.47	0.17%
Mo 202.031†	90.8	12.723	ug/L	0.1943	12.723	ppb	0.1943	1.53%
Na 589.592 Radial†	2444.8	744.55	ug/L	4.048	744.55	ppb	4.048	0.54%
Ni 231.604†	2728.3	66.025	ug/L	0.1581	66.025	ppb	0.1581	0.24%
P 214.914†	1508.4	769.17	ug/L	5.085	769.17	ppb	5.085	0.66%
Pb 220.353†	588.1	71.187	ug/L	1.6294	71.187	ppb	1.6294	2.29%
S 181.975 Axial†	312.1	412.04	ug/L	7.673	412.04	ppb	7.673	1.86%
Sb 206.836†	36.5	2.9686	ug/L	1.59196	2.9686	ppb	1.59196	53.63%
Se 196.026†	-386.9	61.389	ug/L	5.6456	61.389	ppb	5.6456	9.20%
Si 251.611†	1090327.3	33306	ug/L	71.9	33306	ppb	71.9	0.22%
Sn 189.927†	-56.0	-7.1054	ug/L	1.93442	-7.1054	ppb	1.93442	27.22%
Sr 421.552†	13263.6	81.613	ug/L	0.7013	81.613	ppb	0.7013	0.86%
Ti 334.940†	2006974.7	3044.9	ug/L	4.90	3044.9	ppb	4.90	0.16%
Tl 190.801†	-120.9	-1.9694	ug/L	1.04408	-1.9694	ppb	1.04408	53.02%
U 409.014†	-5996.9	-162.64	ug/L	1.899	-162.64	ppb	1.899	1.17%
V 292.402†	14019.3	75.979	ug/L	0.4517	75.979	ppb	0.4517	0.59%
Zn 213.857†	36595.3	325.63	ug/L	1.247	325.63	ppb	1.247	0.38%
SiO2†	1085424.3	70792	ug/L	123.3	70792	ppb	123.3	0.17%

Sequence No.: 21
Sample ID: 244228003|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 1/29/2010 19:45:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228003|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5769.3	5769.3	109	%			19:47:23
1	Y RADIAL	7761.5	7761.5	140.5	%			19:47:23
1	Al 396.153Radial†	46989.8	43067.5	34790	ug/L	34790	ppb	19:47:23
1	Ca 317.933Radial†	4619.1	4202.3	6995.4	ug/L	6995.4	ppb	19:47:23
1	Fe 238.204 Radial†	10667.0	9742.2	93417	ug/L	93417	ppb	19:47:23
1	K 766.490 Radial†	30470.7	25196.7	4546.0	ug/L	4546.0	ppb	19:47:23
1	Mg 279.077 IEC†	165.1	149.6	5614.3	ug/L	5614.3	ppb	19:47:43
1	Na 589.592 Radial†	4327.2	4543.8	1383.8	ug/L	1383.8	ppb	19:47:23
1	Sr 421.552†	7512.5	6801.6	41.841	ug/L	41.841	ppb	19:47:23
1	Sc 361.383	1005795.2	1005795.2	101.39	%			19:48:41
1	Y 371.029	1110948.0	1110948.0	129.19	%			19:48:41
1	Ag 328.068†	-6161.6	-6451.5	3.3079	ug/L	3.3079	ppb	19:48:46
1	As 188.979†	-68.8	-31.3	42.734	ug/L	42.734	ppb	19:49:06
1	B 249.677†	596.1	929.0	6.1117	ug/L	6.1117	ppb	19:48:46
1	Ba 233.527†	31852.6	31431.6	257.93	ug/L	257.93	ppb	19:48:46
1	Be 313.107†	-6497.5	-1605.8	8.2601	ug/L	8.2601	ppb	19:48:46
1	Cd 226.502†	790.2	962.9	1.1532	ug/L	1.1532	ppb	19:49:06
1	Co 228.616†	750.0	808.7	7.6749	ug/L	7.6749	ppb	19:49:06
1	Cr 267.716†	9811.5	9607.5	103.69	ug/L	103.69	ppb	19:48:46
1	Cu 324.752†	19443.3	10206.2	33.918	ug/L	33.918	ppb	19:48:46
1	Mn 257.610†	2280490.1	2248608.9	2536.1	ug/L	2536.1	ppb	19:48:41
1	Mo 202.031†	113.8	101.7	14.318	ug/L	14.318	ppb	19:49:06
1	Ni 231.604†	3056.7	2934.3	71.014	ug/L	71.014	ppb	19:49:06
1	P 214.914†	2047.5	1770.7	906.39	ug/L	906.39	ppb	19:49:06
1	Pb 220.353†	189.6	232.1	26.547	ug/L	26.547	ppb	19:49:06
1	S 181.975 Axial†	92.7	48.6	58.805	ug/L	58.805	ppb	19:49:06
1	Sb 206.836†	71.7	35.8	0.4323	ug/L	0.4323	ppb	19:49:06
1	Se 196.026†	-481.0	-450.7	64.251	ug/L	64.251	ppb	19:49:06
1	Si 251.611†	1140897.6	1124829.5	34360	ug/L	34360	ppb	19:48:41
1	Sn 189.927†	-6.4	-7.4	1.2950	ug/L	1.2950	ppb	19:49:06
1	Ti 334.940†	2603670.7	2568937.1	3897.0	ug/L	3897.0	ppb	19:48:41
1	Tl 190.801†	-192.2	-144.6	-2.5819	ug/L	-2.5819	ppb	19:49:06
1	U 409.014†	-14149.6	-11161.5	-295.82	ug/L	-295.82	ppb	19:48:41
1	V 292.402†	9935.1	11264.9	55.191	ug/L	55.191	ppb	19:48:46
1	Zn 213.857†	45267.6	43725.3	389.58	ug/L	389.58	ppb	19:48:46
1	SiO2†	1141468.4	1125398.4	73399	ug/L	73399	ppb	19:50:14
2	Sc Radial	5745.6	5745.6	109	%			19:47:48
2	Y RADIAL	7755.5	7755.5	140.4	%			19:47:48
2	Al 396.153Radial†	47099.4	43345.5	35015	ug/L	35015	ppb	19:47:48
2	Ca 317.933Radial†	4626.6	4226.7	7035.9	ug/L	7035.9	ppb	19:47:48
2	Fe 238.204 Radial†	10771.8	9878.7	94725	ug/L	94725	ppb	19:47:48
2	K 766.490 Radial†	30672.1	25496.7	4600.2	ug/L	4600.2	ppb	19:47:48
2	Mg 279.077 IEC†	165.3	150.4	5643.2	ug/L	5643.2	ppb	19:48:08
2	Na 589.592 Radial†	4320.1	4553.6	1386.8	ug/L	1386.8	ppb	19:47:48
2	Sr 421.552†	7536.1	6851.6	42.149	ug/L	42.149	ppb	19:47:48
2	Sc 361.383	998566.6	998566.6	100.66	%			19:49:12
2	Y 371.029	1101918.9	1101918.9	128.14	%			19:49:12
2	Ag 328.068†	-6139.1	-6473.2	3.6414	ug/L	3.6414	ppb	19:49:17
2	As 188.979†	-79.2	-42.2	38.563	ug/L	38.563	ppb	19:49:37
2	B 249.677†	700.8	1037.2	8.3840	ug/L	8.3840	ppb	19:49:17
2	Ba 233.527†	32010.2	31815.6	261.08	ug/L	261.08	ppb	19:49:17
2	Be 313.107†	-6243.3	-1399.6	8.3256	ug/L	8.3256	ppb	19:49:17
2	Cd 226.502†	778.8	957.2	0.9535	ug/L	0.9535	ppb	19:49:37
2	Co 228.616†	734.8	799.1	7.4593	ug/L	7.4593	ppb	19:49:37
2	Cr 267.716†	9883.5	9749.0	105.21	ug/L	105.21	ppb	19:49:17
2	Cu 324.752†	19438.7	10340.4	34.367	ug/L	34.367	ppb	19:49:17
2	Mn 257.610†	2268533.2	2253012.6	2541.2	ug/L	2541.2	ppb	19:49:12
2	Mo 202.031†	100.4	89.2	13.562	ug/L	13.562	ppb	19:49:37
2	Ni 231.604†	3032.7	2932.3	70.964	ug/L	70.964	ppb	19:49:37

2	P 214.914†	2070.5	1808.1	926.04 ug/L	926.04 ppb	19:49:37
2	Pb 220.353†	201.6	245.5	28.070 ug/L	28.070 ppb	19:49:37
2	S 181.975 Axial†	100.5	57.1	70.119 ug/L	70.119 ppb	19:49:37
2	Sb 206.836†	64.5	29.2	-1.6480 ug/L	-1.6480 ppb	19:49:37
2	Se 196.026†	-465.0	-438.2	75.428 ug/L	75.428 ppb	19:49:37
2	Si 251.611†	1132895.4	1125025.5	34366 ug/L	34366 ppb	19:49:12
2	Sn 189.927†	4.7	3.6	3.3090 ug/L	3.3090 ppb	19:49:37
2	Ti 334.940†	2582119.3	2566116.8	3892.7 ug/L	3892.7 ppb	19:49:12
2	Tl 190.801†	-209.3	-162.9	-8.5200 ug/L	-8.5200 ppb	19:49:37
2	U 409.014†	-14122.1	-11235.2	-297.85 ug/L	-297.85 ppb	19:49:12
2	V 292.402†	9883.4	11284.5	55.116 ug/L	55.116 ppb	19:49:17
2	Zn 213.857†	45346.7	44127.1	393.12 ug/L	393.12 ppb	19:49:17
2	SiO2†	1141807.9	1133885.3	73952 ug/L	73952 ppb	19:50:20
3	Sc Radial	5766.2	5766.2	109 %		19:48:13
3	Y RADIAL	7731.9	7731.9	140.0 %		19:48:13
3	Al 396.153Radial†	46178.0	42348.5	34209 ug/L	34209 ppb	19:48:13
3	Ca 317.933Radial†	4548.6	4140.1	6891.9 ug/L	6891.9 ppb	19:48:13
3	Fe 238.204 Radial†	10568.6	9657.6	92605 ug/L	92605 ppb	19:48:13
3	K 766.490 Radial†	30056.5	24833.1	4480.4 ug/L	4480.4 ppb	19:48:13
3	Mg 279.077 IEC†	165.4	149.9	5627.8 ug/L	5627.8 ppb	19:48:33
3	Na 589.592 Radial†	4118.9	4355.4	1326.4 ug/L	1326.4 ppb	19:48:13
3	Sr 421.552†	7390.0	6693.3	41.175 ug/L	41.175 ppb	19:48:13
3	Sc 361.383	1011982.1	1011982.1	102.02 %		19:49:43
3	Y 371.029	1113543.1	1113543.1	129.49 %		19:49:43
3	Ag 328.068†	-6042.1	-6297.2	3.7003 ug/L	3.7003 ppb	19:49:48
3	As 188.979†	-76.0	-38.0	39.775 ug/L	39.775 ppb	19:50:08
3	B 249.677†	708.5	1035.6	8.6904 ug/L	8.6904 ppb	19:49:48
3	Ba 233.527†	31886.0	31272.3	256.61 ug/L	256.61 ppb	19:49:48
3	Be 313.107†	-6177.1	-1252.5	8.3815 ug/L	8.3815 ppb	19:49:48
3	Cd 226.502†	803.3	971.0	1.3268 ug/L	1.3268 ppb	19:50:08
3	Co 228.616†	734.0	788.5	7.2652 ug/L	7.2652 ppb	19:50:08
3	Cr 267.716†	9778.4	9515.9	102.70 ug/L	102.70 ppb	19:49:48
3	Cu 324.752†	19346.1	9993.7	33.276 ug/L	33.276 ppb	19:49:48
3	Mn 257.610†	2292632.7	2246760.9	2534.0 ug/L	2534.0 ppb	19:49:43
3	Mo 202.031†	106.0	93.3	13.677 ug/L	13.677 ppb	19:50:08
3	Ni 231.604†	3025.5	2885.2	69.826 ug/L	69.826 ppb	19:50:08
3	P 214.914†	2047.4	1758.2	900.16 ug/L	900.16 ppb	19:50:08
3	Pb 220.353†	192.5	233.9	26.706 ug/L	26.706 ppb	19:50:08
3	S 181.975 Axial†	100.3	55.6	68.264 ug/L	68.264 ppb	19:50:08
3	Sb 206.836†	82.7	46.2	3.8045 ug/L	3.8045 ppb	19:50:08
3	Se 196.026†	-485.3	-452.0	60.820 ug/L	60.820 ppb	19:50:08
3	Si 251.611†	1148157.4	1125066.6	34368 ug/L	34368 ppb	19:49:43
3	Sn 189.927†	12.4	11.1	4.6155 ug/L	4.6155 ppb	19:50:08
3	Ti 334.940†	2617468.5	2566762.8	3893.7 ug/L	3893.7 ppb	19:49:43
3	Tl 190.801†	-199.0	-150.1	-4.3985 ug/L	-4.3985 ppb	19:50:08
3	U 409.014†	-14352.0	-11274.6	-298.61 ug/L	-298.61 ppb	19:49:43
3	V 292.402†	9867.5	11138.8	54.479 ug/L	54.479 ppb	19:49:48
3	Zn 213.857†	45076.3	43264.8	385.47 ug/L	385.47 ppb	19:49:48
3	SiO2†	1144870.5	1121850.6	73167 ug/L	73167 ppb	19:50:26

Mean Data: 244228003|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1005448.0	101.36	%	0.677				0.67%
Sc Radial	5760.4	109	%	0.2				0.22%
Y 371.029	1108803.3	128.94	%	0.710				0.55%
Y RADIAL	7749.7	140.3	%	0.28				0.20%
Ag 328.068†	-6407.3	3.5499	ug/L	0.21163	3.5499	ppb	0.21163	5.96%
Al 396.153Radial†	42920.5	34671	ug/L	415.6	34671	ppb	415.6	1.20%
As 188.979†	-37.2	40.358	ug/L	2.1454	40.358	ppb	2.1454	5.32%
B 249.677†	1000.6	7.7287	ug/L	1.40872	7.7287	ppb	1.40872	18.23%
Ba 233.527†	31506.5	258.54	ug/L	2.298	258.54	ppb	2.298	0.89%
Be 313.107†	-1419.3	8.3224	ug/L	0.06077	8.3224	ppb	0.06077	0.73%
Ca 317.933Radial†	4189.7	6974.4	ug/L	74.30	6974.4	ppb	74.30	1.07%
Cd 226.502†	963.7	1.1445	ug/L	0.18678	1.1445	ppb	0.18678	16.32%
Co 228.616†	798.8	7.4665	ug/L	0.20493	7.4665	ppb	0.20493	2.74%
Cr 267.716†	9624.1	103.87	ug/L	1.264	103.87	ppb	1.264	1.22%
Cu 324.752†	10180.1	33.854	ug/L	0.5481	33.854	ppb	0.5481	1.62%
Fe 238.204 Radial†	9759.5	93582	ug/L	1069.9	93582	ppb	1069.9	1.14%
K 766.490 Radial†	25175.5	4542.2	ug/L	59.96	4542.2	ppb	59.96	1.32%

Mg 279.077 IEC†	150.0	5628.4	ug/L	14.46	5628.4	ppb	14.46	0.26%
Mn 257.610†	2249460.8	2537.1	ug/L	3.71	2537.1	ppb	3.71	0.15%
Mo 202.031†	94.7	13.852	ug/L	0.4071	13.852	ppb	0.4071	2.94%
Na 589.592 Radial†	4484.3	1365.7	ug/L	34.01	1365.7	ppb	34.01	2.49%
Ni 231.604†	2917.3	70.601	ug/L	0.6721	70.601	ppb	0.6721	0.95%
P 214.914†	1779.0	910.87	ug/L	13.504	910.87	ppb	13.504	1.48%
Pb 220.353†	237.2	27.108	ug/L	0.8369	27.108	ppb	0.8369	3.09%
S 181.975 Axial†	53.8	65.730	ug/L	6.0680	65.730	ppb	6.0680	9.23%
Sb 206.836†	37.1	0.8629	ug/L	2.75165	0.8629	ppb	2.75165	318.87%
Se 196.026†	-446.9	66.833	ug/L	7.6388	66.833	ppb	7.6388	11.43%
Si 251.611†	1124973.9	34365	ug/L	3.9	34365	ppb	3.9	0.01%
Sn 189.927†	2.4	3.0732	ug/L	1.67275	3.0732	ppb	1.67275	54.43%
Sr 421.552†	6782.2	41.721	ug/L	0.4977	41.721	ppb	0.4977	1.19%
Ti 334.940†	2567272.2	3894.5	ug/L	2.24	3894.5	ppb	2.24	0.06%
Tl 190.801†	-152.5	-5.1668	ug/L	3.04267	-5.1668	ppb	3.04267	58.89%
U 409.014†	-11223.8	-297.43	ug/L	1.444	-297.43	ppb	1.444	0.49%
V 292.402†	11229.4	54.929	ug/L	0.3915	54.929	ppb	0.3915	0.71%
Zn 213.857†	43705.7	389.39	ug/L	3.832	389.39	ppb	3.832	0.98%
SiO2†	1127044.8	73506	ug/L	403.3	73506	ppb	403.3	0.55%

Sequence No.: 22
Sample ID: 244228004|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 1/29/2010 19:52:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228004|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5684.0	5684.0	108	%			19:54:30
1	Y RADIAL	6783.8	6783.8	122.8	%			19:54:30
1	Al 396.153Radial†	52704.1	49015.5	39594	ug/L	39594	ppb	19:54:30
1	Ca 317.933Radial†	7892.0	7302.9	12157	ug/L	12157	ppb	19:54:30
1	Fe 238.204 Radial†	23130.2	21454.4	205720	ug/L	205720	ppb	19:54:30
1	K 766.490 Radial†	49165.9	42964.0	7752.2	ug/L	7752.2	ppb	19:54:30
1	Mg 279.077 IEC†	269.4	248.6	9276.5	ug/L	9276.5	ppb	19:54:50
1	Na 589.592 Radial†	2663.0	3058.9	931.56	ug/L	931.56	ppb	19:54:30
1	Sr 421.552†	13921.9	12852.6	79.072	ug/L	79.072	ppb	19:54:30
1	Sc 361.383	990204.2	990204.2	99.820	%			19:55:54
1	Y 371.029	964143.7	964143.7	112.12	%			19:55:54
1	Ag 328.068†	-14121.8	-14521.7	6.0988	ug/L	6.0988	ppb	19:55:54
1	As 188.979†	-229.6	-193.5	57.714	ug/L	57.714	ppb	19:56:14
1	B 249.677†	1937.9	2282.5	18.827	ug/L	18.827	ppb	19:55:54
1	Ba 233.527†	52866.2	52977.7	436.53	ug/L	436.53	ppb	19:55:54
1	Be 313.107†	-55796.6	-51094.5	4.7104	ug/L	4.7104	ppb	19:55:54
1	Cd 226.502†	1945.7	2132.7	2.6966	ug/L	2.6966	ppb	19:56:14
1	Co 228.616†	2740.4	2814.4	35.160	ug/L	35.160	ppb	19:56:14
1	Cr 267.716†	8261.7	8207.3	91.305	ug/L	91.305	ppb	19:55:54
1	Cu 324.752†	17971.3	9033.6	36.505	ug/L	36.505	ppb	19:55:54
1	Mn 257.610†	3614527.5	3620460.4	4088.8	ug/L	4088.8	ppb	19:55:48
1	Mo 202.031†	185.8	175.6	28.172	ug/L	28.172	ppb	19:55:54
1	Ni 231.604†	2371.5	2295.3	55.521	ug/L	55.521	ppb	19:56:14
1	P 214.914†	4098.8	3857.5	1971.1	ug/L	1971.1	ppb	19:56:14
1	Pb 220.353†	640.2	686.5	71.580	ug/L	71.580	ppb	19:56:14
1	S 181.975 Axial†	376.5	334.4	441.68	ug/L	441.68	ppb	19:56:14
1	Sb 206.836†	120.8	86.2	-1.2947	ug/L	-1.2947	ppb	19:56:14
1	Se 196.026†	-1043.3	-1021.4	123.27	ug/L	123.27	ppb	19:56:14
1	Si 251.611†	1145688.2	1147345.8	35048	ug/L	35048	ppb	19:55:54
1	Sn 189.927†	-48.6	-49.8	-3.7255	ug/L	-3.7255	ppb	19:56:14
1	Ti 334.940†	6768735.4	6781928.0	10287	ug/L	10287	ppb	19:55:48
1	Tl 190.801†	-379.0	-334.7	-4.2749	ug/L	-4.2749	ppb	19:56:14
1	U 409.014†	-10662.8	-7888.2	-225.02	ug/L	-225.02	ppb	19:55:54
1	V 292.402†	40416.1	41955.0	232.07	ug/L	232.07	ppb	19:55:54
1	Zn 213.857†	92451.7	91697.2	816.69	ug/L	816.69	ppb	19:55:54
1	SiO2†	1151733.8	1153408.2	75225	ug/L	75225	ppb	19:57:26
2	Sc Radial	5530.6	5530.6	105	%			19:54:55
2	Y RADIAL	6594.3	6594.3	119.4	%			19:54:55
2	Al 396.153Radial†	51550.6	49271.3	39801	ug/L	39801	ppb	19:54:55
2	Ca 317.933Radial†	7744.5	7365.4	12261	ug/L	12261	ppb	19:54:55
2	Fe 238.204 Radial†	22648.6	21590.2	207020	ug/L	207020	ppb	19:54:55
2	K 766.490 Radial†	48016.0	43132.2	7782.5	ug/L	7782.5	ppb	19:54:55
2	Mg 279.077 IEC†	267.8	254.0	9481.6	ug/L	9481.6	ppb	19:55:15
2	Na 589.592 Radial†	2523.9	2994.7	912.02	ug/L	912.02	ppb	19:54:55
2	Sr 421.552†	13498.1	12806.6	78.788	ug/L	78.788	ppb	19:54:55
2	Sc 361.383	989180.0	989180.0	99.717	%			19:56:27
2	Y 371.029	962235.0	962235.0	111.89	%			19:56:27
2	Ag 328.068†	-14295.7	-14710.8	5.7159	ug/L	5.7159	ppb	19:56:27
2	As 188.979†	-216.5	-180.6	64.316	ug/L	64.316	ppb	19:56:47
2	B 249.677†	1864.8	2211.1	16.978	ug/L	16.978	ppb	19:56:27
2	Ba 233.527†	52814.1	52980.3	436.59	ug/L	436.59	ppb	19:56:27
2	Be 313.107†	-55139.8	-50493.7	5.1855	ug/L	5.1855	ppb	19:56:27
2	Cd 226.502†	1940.6	2129.7	2.5282	ug/L	2.5282	ppb	19:56:47
2	Co 228.616†	2736.4	2813.2	34.879	ug/L	34.879	ppb	19:56:47
2	Cr 267.716†	8270.9	8225.1	91.517	ug/L	91.517	ppb	19:56:27
2	Cu 324.752†	17976.8	9057.7	36.640	ug/L	36.640	ppb	19:56:27
2	Mn 257.610†	3647830.9	3657607.3	4130.7	ug/L	4130.7	ppb	19:56:21
2	Mo 202.031†	178.8	168.8	27.806	ug/L	27.806	ppb	19:56:27
2	Ni 231.604†	2352.4	2278.6	55.118	ug/L	55.118	ppb	19:56:47

2	P 214.914†	4062.6	3825.4	1952.4 ug/L	1952.4 ppb	19:56:47
2	Pb 220.353†	666.7	713.7	74.775 ug/L	74.775 ppb	19:56:47
2	S 181.975 Axial†	365.7	324.0	427.66 ug/L	427.66 ppb	19:56:47
2	Sb 206.836†	112.2	77.7	-4.3886 ug/L	-4.3886 ppb	19:56:47
2	Se 196.026†	-1061.3	-1040.5	117.11 ug/L	117.11 ppb	19:56:47
2	Si 251.611†	1144360.1	1147202.2	35044 ug/L	35044 ppb	19:56:27
2	Sn 189.927†	-55.1	-56.4	-4.8792 ug/L	-4.8792 ppb	19:56:47
2	Ti 334.940†	6835827.5	6856230.9	10400 ug/L	10400 ppb	19:56:21
2	Tl 190.801†	-361.3	-317.3	2.4734 ug/L	2.4734 ppb	19:56:47
2	U 409.014†	-10536.9	-7773.0	-222.23 ug/L	-222.23 ppb	19:56:27
2	V 292.402†	40438.2	42019.1	232.18 ug/L	232.18 ppb	19:56:27
2	Zn 213.857†	92480.0	91821.5	817.70 ug/L	817.70 ppb	19:56:27
2	SiO2†	1164153.3	1167057.5	76116 ug/L	76116 ppb	19:57:32
3	Sc Radial	5748.8	5748.8	109 %		19:55:20
3	Y RADIAL	6835.9	6835.9	123.8 %		19:55:20
3	Al 396.153Radial†	53355.0	49061.4	39632 ug/L	39632 ppb	19:55:20
3	Ca 317.933Radial†	7980.4	7301.5	12154 ug/L	12154 ppb	19:55:20
3	Fe 238.204 Radial†	23322.2	21388.6	205090 ug/L	205090 ppb	19:55:20
3	K 766.490 Radial†	49570.1	42820.6	7726.3 ug/L	7726.3 ppb	19:55:20
3	Mg 279.077 IEC†	269.3	245.8	9168.8 ug/L	9168.8 ppb	19:55:40
3	Na 589.592 Radial†	2632.8	3003.3	914.64 ug/L	914.64 ppb	19:55:20
3	Sr 421.552†	13986.8	12766.5	78.542 ug/L	78.542 ppb	19:55:20
3	Sc 361.383	1001998.5	1001998.5	101.01 %		19:57:00
3	Y 371.029	974953.1	974953.1	113.37 %		19:57:00
3	Ag 328.068†	-14342.7	-14573.9	5.6655 ug/L	5.6655 ppb	19:57:00
3	As 188.979†	-218.5	-179.8	62.396 ug/L	62.396 ppb	19:57:20
3	B 249.677†	1955.5	2277.1	18.809 ug/L	18.809 ppb	19:57:00
3	Ba 233.527†	53290.7	52774.6	434.86 ug/L	434.86 ppb	19:57:00
3	Be 313.107†	-56321.2	-50955.9	4.5492 ug/L	4.5492 ppb	19:57:00
3	Cd 226.502†	1920.8	2085.2	2.2276 ug/L	2.2276 ppb	19:57:20
3	Co 228.616†	2725.6	2767.4	34.370 ug/L	34.370 ppb	19:57:20
3	Cr 267.716†	8420.6	8267.2	91.923 ug/L	91.923 ppb	19:57:00
3	Cu 324.752†	18114.9	8963.7	36.273 ug/L	36.273 ppb	19:57:00
3	Mn 257.610†	3622530.2	3585760.6	4049.8 ug/L	4049.8 ppb	19:56:54
3	Mo 202.031†	186.6	174.2	28.029 ug/L	28.029 ppb	19:57:00
3	Ni 231.604†	2362.5	2258.4	54.630 ug/L	54.630 ppb	19:57:20
3	P 214.914†	4041.3	3752.3	1913.5 ug/L	1913.5 ppb	19:57:20
3	Pb 220.353†	656.5	695.1	72.683 ug/L	72.683 ppb	19:57:20
3	S 181.975 Axial†	377.4	330.9	437.01 ug/L	437.01 ppb	19:57:20
3	Sb 206.836†	124.3	88.2	-0.3520 ug/L	-0.3520 ppb	19:57:20
3	Se 196.026†	-1042.8	-1008.7	128.18 ug/L	128.18 ppb	19:57:20
3	Si 251.611†	1153942.6	1142007.8	34885 ug/L	34885 ppb	19:57:00
3	Sn 189.927†	-44.8	-45.4	-2.9460 ug/L	-2.9460 ppb	19:57:20
3	Ti 334.940†	6787241.7	6720432.2	10194 ug/L	10194 ppb	19:56:54
3	Tl 190.801†	-362.7	-314.1	1.4376 ug/L	1.4376 ppb	19:57:20
3	U 409.014†	-10667.9	-7767.5	-221.87 ug/L	-221.87 ppb	19:57:00
3	V 292.402†	40699.0	41758.5	230.98 ug/L	230.98 ppb	19:57:00
3	Zn 213.857†	92948.2	91098.5	811.29 ug/L	811.29 ppb	19:57:00
3	SiO2†	1162658.7	1150642.7	75045 ug/L	75045 ppb	19:57:38

Mean Data: 244228004|940165|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	993794.3	100.18	%	0.718				0.72%
Sc Radial	5654.5	107	%	2.1				1.98%
Y 371.029	967110.6	112.46	%	0.798				0.71%
Y RADIAL	6738.0	122.0	%	2.30				1.89%
Ag 328.068†	-14602.2	5.8267	ug/L	0.23695	5.8267	ppb	0.23695	4.07%
Al 396.153Radial†	49116.1	39676	ug/L	110.2	39676	ppb	110.2	0.28%
As 188.979†	-184.7	61.475	ug/L	3.3958	61.475	ppb	3.3958	5.52%
B 249.677†	2256.9	18.205	ug/L	1.0621	18.205	ppb	1.0621	5.83%
Ba 233.527†	52910.9	436.00	ug/L	0.982	436.00	ppb	0.982	0.23%
Be 313.107†	-50848.0	4.8150	ug/L	0.33079	4.8150	ppb	0.33079	6.87%
Ca 317.933Radial†	7323.3	12191	ug/L	60.7	12191	ppb	60.7	0.50%
Cd 226.502†	2115.9	2.4841	ug/L	0.23754	2.4841	ppb	0.23754	9.56%
Co 228.616†	2798.4	34.803	ug/L	0.4005	34.803	ppb	0.4005	1.15%
Cr 267.716†	8233.2	91.582	ug/L	0.3143	91.582	ppb	0.3143	0.34%
Cu 324.752†	9018.3	36.473	ug/L	0.1859	36.473	ppb	0.1859	0.51%
Fe 238.204 Radial†	21477.7	205950	ug/L	985.4	205950	ppb	985.4	0.48%
K 766.490 Radial†	42972.3	7753.7	ug/L	28.14	7753.7	ppb	28.14	0.36%

Mg 279.077 IEC†	249.4	9309.0	ug/L	158.93	9309.0	ppb	158.93	1.71%
Mn 257.610†	3621276.1	4089.8	ug/L	40.47	4089.8	ppb	40.47	0.99%
Mo 202.031†	172.8	28.002	ug/L	0.1843	28.002	ppb	0.1843	0.66%
Na 589.592 Radial†	3019.0	919.41	ug/L	10.607	919.41	ppb	10.607	1.15%
Ni 231.604†	2277.5	55.090	ug/L	0.4466	55.090	ppb	0.4466	0.81%
P 214.914†	3811.7	1945.7	ug/L	29.37	1945.7	ppb	29.37	1.51%
Pb 220.353†	698.4	73.013	ug/L	1.6228	73.013	ppb	1.6228	2.22%
S 181.975 Axial†	329.8	435.45	ug/L	7.135	435.45	ppb	7.135	1.64%
Sb 206.836†	84.0	-2.0117	ug/L	2.11170	-2.0117	ppb	2.11170	104.97%
Se 196.026†	-1023.5	122.85	ug/L	5.547	122.85	ppb	5.547	4.52%
Si 251.611†	1145518.6	34992	ug/L	92.9	34992	ppb	92.9	0.27%
Sn 189.927†	-50.5	-3.8502	ug/L	0.97259	-3.8502	ppb	0.97259	25.26%
Sr 421.552†	12808.6	78.801	ug/L	0.2655	78.801	ppb	0.2655	0.34%
Ti 334.940†	6786197.0	10294	ug/L	103.1	10294	ppb	103.1	1.00%
Tl 190.801†	-322.0	-0.1213	ug/L	3.63424	-0.1213	ppb	3.63424	>999.9%
U 409.014†	-7809.6	-223.04	ug/L	1.725	-223.04	ppb	1.725	0.77%
V 292.402†	41910.9	231.74	ug/L	0.661	231.74	ppb	0.661	0.29%
Zn 213.857†	91539.1	815.23	ug/L	3.445	815.23	ppb	3.445	0.42%
SiO2†	1157036.1	75462	ug/L	573.2	75462	ppb	573.2	0.76%

Sequence No.: 23
Sample ID: 244228004|940165|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 1/29/2010 19:59:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228004|940165|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5626.6	5626.6	107	%			20:01:41
1	Y RADIAL	6032.9	6032.9	109.2	%			20:01:41
1	Al 396.153Radial†	9954.2	9438.4	7624.3	ug/L	7624.3	ppb	20:01:41
1	Ca 317.933Radial†	1560.8	1442.5	2401.2	ug/L	2401.2	ppb	20:02:02
1	Fe 238.204 Radial†	4805.5	4494.9	43101	ug/L	43101	ppb	20:01:41
1	K 766.490 Radial†	11698.3	8305.3	1498.5	ug/L	1498.5	ppb	20:01:41
1	Mg 279.077 IEC†	52.2	47.6	1773.0	ug/L	1773.0	ppb	20:02:02
1	Na 589.592 Radial†	-15.9	572.7	174.41	ug/L	174.41	ppb	20:01:41
1	Sr 421.552†	2732.7	2495.1	15.350	ug/L	15.350	ppb	20:01:41
1	Sc 361.383	986917.4	986917.4	99.489	%			20:02:59
1	Y 371.029	870066.3	870066.3	101.18	%			20:02:59
1	Ag 328.068†	-2556.3	-2943.9	1.6913	ug/L	1.6913	ppb	20:03:04
1	As 188.979†	-68.2	-32.0	14.622	ug/L	14.622	ppb	20:03:24
1	B 249.677†	256.5	599.0	6.7193	ug/L	6.7193	ppb	20:03:04
1	Ba 233.527†	10456.9	10527.0	86.811	ug/L	86.811	ppb	20:03:04
1	Be 313.107†	-14460.7	-9732.5	1.0825	ug/L	1.0825	ppb	20:03:04
1	Cd 226.502†	246.9	431.7	0.3938	ug/L	0.3938	ppb	20:03:24
1	Co 228.616†	479.5	551.0	6.7858	ug/L	6.7858	ppb	20:03:24
1	Cr 267.716†	1770.9	1710.8	19.035	ug/L	19.035	ppb	20:03:04
1	Cu 324.752†	10704.0	1788.9	7.3580	ug/L	7.3580	ppb	20:03:04
1	Mn 257.610†	726789.6	729951.9	824.55	ug/L	824.55	ppb	20:02:59
1	Mo 202.031†	39.1	28.7	5.3462	ug/L	5.3462	ppb	20:03:24
1	Ni 231.604†	533.5	455.8	11.024	ug/L	11.024	ppb	20:03:24
1	P 214.914†	1004.1	760.6	386.57	ug/L	386.57	ppb	20:03:24
1	Pb 220.353†	99.6	145.2	15.016	ug/L	15.016	ppb	20:03:24
1	S 181.975 Axial†	105.7	63.5	83.801	ug/L	83.801	ppb	20:03:24
1	Sb 206.836†	50.4	15.8	-0.6340	ug/L	-0.6340	ppb	20:03:24
1	Se 196.026†	-205.2	-182.6	42.997	ug/L	42.997	ppb	20:03:24
1	Si 251.611†	226317.6	227076.2	6936.5	ug/L	6936.5	ppb	20:02:59
1	Sn 189.927†	-13.6	-14.8	-1.5945	ug/L	-1.5945	ppb	20:03:24
1	Ti 334.940†	1337732.0	1345616.7	2041.2	ug/L	2041.2	ppb	20:02:59
1	Tl 190.801†	-109.1	-64.6	-0.2043	ug/L	-0.2043	ppb	20:03:24
1	U 409.014†	-4617.3	-1847.2	-52.110	ug/L	-52.110	ppb	20:02:59
1	V 292.402†	6893.0	8394.6	46.148	ug/L	46.148	ppb	20:03:04
1	Zn 213.857†	18974.0	18150.6	161.43	ug/L	161.43	ppb	20:03:04
1	SiO2†	230086.0	230869.9	15057	ug/L	15057	ppb	20:04:32
2	Sc Radial	5608.3	5608.3	106	%			20:02:07
2	Y RADIAL	6011.3	6011.3	108.8	%			20:02:07
2	Al 396.153Radial†	9935.6	9451.4	7634.8	ug/L	7634.8	ppb	20:02:07
2	Ca 317.933Radial†	1579.0	1464.4	2437.7	ug/L	2437.7	ppb	20:02:27
2	Fe 238.204 Radial†	4782.5	4487.9	43034	ug/L	43034	ppb	20:02:07
2	K 766.490 Radial†	11665.8	8310.5	1499.5	ug/L	1499.5	ppb	20:02:07
2	Mg 279.077 IEC†	56.1	51.4	1917.1	ug/L	1917.1	ppb	20:02:27
2	Na 589.592 Radial†	-34.2	555.5	169.17	ug/L	169.17	ppb	20:02:07
2	Sr 421.552†	2718.2	2489.7	15.317	ug/L	15.317	ppb	20:02:07
2	Sc 361.383	991242.9	991242.9	99.925	%			20:03:30
2	Y 371.029	874876.4	874876.4	101.73	%			20:03:30
2	Ag 328.068†	-2554.5	-2930.9	1.7224	ug/L	1.7224	ppb	20:03:35
2	As 188.979†	-79.5	-43.0	10.040	ug/L	10.040	ppb	20:03:55
2	B 249.677†	222.4	563.7	5.9200	ug/L	5.9200	ppb	20:03:35
2	Ba 233.527†	10523.1	10547.4	86.973	ug/L	86.973	ppb	20:03:35
2	Be 313.107†	-14758.6	-9967.2	0.9908	ug/L	0.9908	ppb	20:03:35
2	Cd 226.502†	239.6	423.3	0.3069	ug/L	0.3069	ppb	20:03:55
2	Co 228.616†	490.5	560.0	6.9818	ug/L	6.9818	ppb	20:03:55
2	Cr 267.716†	1678.6	1610.6	17.973	ug/L	17.973	ppb	20:03:35
2	Cu 324.752†	10835.6	1873.6	7.5932	ug/L	7.5932	ppb	20:03:35
2	Mn 257.610†	727143.0	727117.8	821.35	ug/L	821.35	ppb	20:03:30
2	Mo 202.031†	41.4	30.8	5.4856	ug/L	5.4856	ppb	20:03:55
2	Ni 231.604†	574.9	494.8	11.970	ug/L	11.970	ppb	20:03:55

2	P 214.914†	997.4	749.5	380.40	ug/L	380.40 ppb	20:03:55
2	Pb 220.353†	103.2	148.4	15.411	ug/L	15.411 ppb	20:03:55
2	S 181.975 Axial†	105.3	62.6	82.658	ug/L	82.658 ppb	20:03:55
2	Sb 206.836†	50.9	16.0	-0.5559	ug/L	-0.5559 ppb	20:03:55
2	Se 196.026†	-219.9	-196.3	35.257	ug/L	35.257 ppb	20:03:55
2	Si 251.611†	226671.7	226437.9	6917.0	ug/L	6917.0 ppb	20:03:30
2	Sn 189.927†	-18.3	-19.4	-2.4327	ug/L	-2.4327 ppb	20:03:55
2	Ti 334.940†	1341856.8	1343877.1	2038.5	ug/L	2038.5 ppb	20:03:30
2	Tl 190.801†	-112.5	-67.5	-1.1917	ug/L	-1.1917 ppb	20:03:55
2	U 409.014†	-4604.9	-1814.6	-51.268	ug/L	-51.268 ppb	20:03:30
2	V 292.402†	6865.5	8336.9	45.792	ug/L	45.792 ppb	20:03:35
2	Zn 213.857†	19038.3	18131.8	161.25	ug/L	161.25 ppb	20:03:35
2	SiO2†	226381.2	226153.2	14750	ug/L	14750 ppb	20:04:37
3	Sc Radial	5594.3	5594.3	106	%		20:02:32
3	Y RADIAL	5994.2	5994.2	108.5	%		20:02:32
3	Al 396.153Radial†	9930.6	9470.0	7649.8	ug/L	7649.8 ppb	20:02:32
3	Ca 317.933Radial†	1594.5	1482.7	2468.2	ug/L	2468.2 ppb	20:02:52
3	Fe 238.204 Radial†	4782.9	4499.5	43145	ug/L	43145 ppb	20:02:32
3	K 766.490 Radial†	11671.0	8342.8	1505.3	ug/L	1505.3 ppb	20:02:32
3	Mg 279.077 IEC†	55.2	50.7	1891.7	ug/L	1891.7 ppb	20:02:52
3	Na 589.592 Radial†	-67.7	523.8	159.53	ug/L	159.53 ppb	20:02:32
3	Sr 421.552†	2703.2	2482.0	15.269	ug/L	15.269 ppb	20:02:32
3	Sc 361.383	1006573.8	1006573.8	101.47	%		20:04:01
3	Y 371.029	889731.6	889731.6	103.46	%		20:04:01
3	Ag 328.068†	-2545.0	-2882.6	1.9567	ug/L	1.9567 ppb	20:04:06
3	As 188.979†	-64.3	-26.9	16.688	ug/L	16.688 ppb	20:04:26
3	B 249.677†	201.0	539.2	5.3417	ug/L	5.3417 ppb	20:04:06
3	Ba 233.527†	10444.3	10309.3	85.043	ug/L	85.043 ppb	20:04:06
3	Be 313.107†	-14762.1	-9745.7	1.0681	ug/L	1.0681 ppb	20:04:06
3	Cd 226.502†	252.1	432.0	0.3932	ug/L	0.3932 ppb	20:04:26
3	Co 228.616†	474.5	536.7	6.4915	ug/L	6.4915 ppb	20:04:26
3	Cr 267.716†	1727.1	1632.8	18.208	ug/L	18.208 ppb	20:04:06
3	Cu 324.752†	10759.8	1633.8	6.9198	ug/L	6.9198 ppb	20:04:06
3	Mn 257.610†	736095.0	724856.8	818.82	ug/L	818.82 ppb	20:04:01
3	Mo 202.031†	48.8	37.5	5.9549	ug/L	5.9549 ppb	20:04:26
3	Ni 231.604†	560.8	472.2	11.422	ug/L	11.422 ppb	20:04:26
3	P 214.914†	1011.0	747.7	379.50	ug/L	379.50 ppb	20:04:26
3	Pb 220.353†	103.7	147.3	15.275	ug/L	15.275 ppb	20:04:26
3	S 181.975 Axial†	101.6	57.3	75.573	ug/L	75.573 ppb	20:04:26
3	Sb 206.836†	51.5	15.9	-0.5653	ug/L	-0.5653 ppb	20:04:26
3	Se 196.026†	-219.5	-192.6	37.658	ug/L	37.658 ppb	20:04:26
3	Si 251.611†	230305.1	226563.7	6920.9	ug/L	6920.9 ppb	20:04:01
3	Sn 189.927†	-5.6	-6.7	-0.1083	ug/L	-0.1083 ppb	20:04:26
3	Ti 334.940†	1361544.0	1342826.0	2036.9	ug/L	2036.9 ppb	20:04:01
3	Tl 190.801†	-114.9	-68.2	-1.4140	ug/L	-1.4140 ppb	20:04:26
3	U 409.014†	-4519.0	-1659.7	-47.329	ug/L	-47.329 ppb	20:04:01
3	V 292.402†	6865.5	8232.3	45.110	ug/L	45.110 ppb	20:04:06
3	Zn 213.857†	19054.7	17857.8	158.75	ug/L	158.75 ppb	20:04:06
3	SiO2†	229442.0	225719.0	14721	ug/L	14721 ppb	20:04:42

Mean Data: 244228004|940165|5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	994911.3	100.29	%	1.041				1.04%
Sc Radial	5609.8	106	%	0.3				0.29%
Y 371.029	878224.8	102.12	%	1.192				1.17%
Y RADIAL	6012.8	108.9	%	0.35				0.32%
Ag 328.068†	-2919.2	1.7901	ug/L	0.14508	1.7901	ppb	0.14508	8.10%
Al 396.153Radial†	9453.3	7636.3	ug/L	12.80	7636.3	ppb	12.80	0.17%
As 188.979†	-34.0	13.783	ug/L	3.4024	13.783	ppb	3.4024	24.69%
B 249.677†	567.3	5.9937	ug/L	0.69174	5.9937	ppb	0.69174	11.54%
Ba 233.527†	10461.2	86.276	ug/L	1.0701	86.276	ppb	1.0701	1.24%
Be 313.107†	-9815.1	1.0471	ug/L	0.04928	1.0471	ppb	0.04928	4.71%
Ca 317.933Radial†	1463.2	2435.7	ug/L	33.55	2435.7	ppb	33.55	1.38%
Cd 226.502†	429.0	0.3646	ug/L	0.04999	0.3646	ppb	0.04999	13.71%
Co 228.616†	549.2	6.7530	ug/L	0.24679	6.7530	ppb	0.24679	3.65%
Cr 267.716†	1651.4	18.405	ug/L	0.5580	18.405	ppb	0.5580	3.03%
Cu 324.752†	1765.4	7.2903	ug/L	0.34176	7.2903	ppb	0.34176	4.69%
Fe 238.204 Radial†	4494.1	43093	ug/L	55.7	43093	ppb	55.7	0.13%
K 766.490 Radial†	8319.6	1501.1	ug/L	3.66	1501.1	ppb	3.66	0.24%

Mg 279.077 IEC†	49.9	1860.6	ug/L	76.93	1860.6	ppb	76.93	4.13%
Mn 257.610†	727308.8	821.57	ug/L	2.870	821.57	ppb	2.870	0.35%
Mo 202.031†	32.3	5.5956	ug/L	0.31892	5.5956	ppb	0.31892	5.70%
Na 589.592 Radial†	550.7	167.71	ug/L	7.550	167.71	ppb	7.550	4.50%
Ni 231.604†	474.3	11.472	ug/L	0.4749	11.472	ppb	0.4749	4.14%
P 214.914†	752.6	382.15	ug/L	3.847	382.15	ppb	3.847	1.01%
Pb 220.353†	147.0	15.234	ug/L	0.2007	15.234	ppb	0.2007	1.32%
S 181.975 Axial†	61.1	80.677	ug/L	4.4573	80.677	ppb	4.4573	5.52%
Sb 206.836†	15.9	-0.5851	ug/L	0.04265	-0.5851	ppb	0.04265	7.29%
Se 196.026†	-190.5	38.637	ug/L	3.9621	38.637	ppb	3.9621	10.25%
Si 251.611†	226692.6	6924.8	ug/L	10.33	6924.8	ppb	10.33	0.15%
Sn 189.927†	-13.6	-1.3785	ug/L	1.17718	-1.3785	ppb	1.17718	85.39%
Sr 421.552†	2488.9	15.312	ug/L	0.0409	15.312	ppb	0.0409	0.27%
Ti 334.940†	1344106.6	2038.9	ug/L	2.14	2038.9	ppb	2.14	0.10%
Tl 190.801†	-66.8	-0.9367	ug/L	0.64390	-0.9367	ppb	0.64390	68.74%
U 409.014†	-1773.8	-50.236	ug/L	2.5526	-50.236	ppb	2.5526	5.08%
V 292.402†	8321.3	45.683	ug/L	0.5274	45.683	ppb	0.5274	1.15%
Zn 213.857†	18046.7	160.48	ug/L	1.500	160.48	ppb	1.500	0.93%
SiO2†	227580.7	14843	ug/L	186.3	14843	ppb	186.3	1.26%

Sequence No.: 24
Sample ID: 244228005|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 1/29/2010 20:06:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228005|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5528.1	5528.1	105	%			20:08:46
1	Y RADIAL	6620.2	6620.2	119.9	%			20:08:46
1	Al 396.153Radial†	33990.9	32539.2	26284	ug/L	26284	ppb	20:08:46
1	Ca 317.933Radial†	3499.4	3318.2	5523.7	ug/L	5523.7	ppb	20:09:06
1	Fe 238.204 Radial†	8079.5	7698.9	73824	ug/L	73824	ppb	20:08:46
1	K 766.490 Radial†	26767.6	22879.0	4128.3	ug/L	4128.3	ppb	20:08:46
1	Mg 279.077 IEC†	110.5	104.1	3896.7	ug/L	3896.7	ppb	20:09:06
1	Na 589.592 Radial†	4195.4	4590.7	1398.1	ug/L	1398.1	ppb	20:08:46
1	Sr 421.552†	8249.0	7804.1	48.026	ug/L	48.026	ppb	20:08:46
1	Sc 361.383	1008158.7	1008158.7	101.63	%			20:10:03
1	Y 371.029	985036.5	985036.5	114.54	%			20:10:03
1	Ag 328.068†	-4539.0	-4840.7	3.6837	ug/L	3.6837	ppb	20:10:09
1	As 188.979†	-45.4	-8.2	38.538	ug/L	38.538	ppb	20:10:29
1	B 249.677†	698.8	1028.7	11.587	ug/L	11.587	ppb	20:10:09
1	Ba 233.527†	27899.5	27468.3	225.16	ug/L	225.16	ppb	20:10:09
1	Be 313.107†	-13722.2	-8699.6	3.2955	ug/L	3.2955	ppb	20:10:09
1	Cd 226.502†	563.4	737.9	0.7316	ug/L	0.7316	ppb	20:10:29
1	Co 228.616†	650.4	709.0	8.0090	ug/L	8.0090	ppb	20:10:29
1	Cr 267.716†	27426.3	26917.1	286.40	ug/L	286.40	ppb	20:10:09
1	Cu 324.752†	17642.1	8389.0	27.693	ug/L	27.693	ppb	20:10:09
1	Mn 257.610†	1412432.8	1389204.3	1568.4	ug/L	1568.4	ppb	20:10:03
1	Mo 202.031†	511.4	492.6	39.626	ug/L	39.626	ppb	20:10:29
1	Ni 231.604†	7101.1	6906.7	167.17	ug/L	167.17	ppb	20:10:29
1	P 214.914†	1086.8	820.6	395.98	ug/L	395.98	ppb	20:10:29
1	Pb 220.353†	262.5	303.4	35.211	ug/L	35.211	ppb	20:10:29
1	S 181.975 Axial†	285.6	238.3	315.06	ug/L	315.06	ppb	20:10:29
1	Sb 206.836†	74.6	38.5	5.1163	ug/L	5.1163	ppb	20:10:29
1	Se 196.026†	-354.1	-324.7	67.991	ug/L	67.991	ppb	20:10:29
1	Si 251.611†	963120.0	947265.9	28936	ug/L	28936	ppb	20:10:03
1	Sn 189.927†	2.2	1.1	2.2769	ug/L	2.2769	ppb	20:10:29
1	Ti 334.940†	1908455.1	1878854.1	2850.2	ug/L	2850.2	ppb	20:10:03
1	Tl 190.801†	-130.6	-83.5	3.9100	ug/L	3.9100	ppb	20:10:29
1	U 409.014†	-10117.8	-7161.7	-191.88	ug/L	-191.88	ppb	20:10:03
1	V 292.402†	7957.6	9296.2	46.817	ug/L	46.817	ppb	20:10:09
1	Zn 213.857†	33650.1	32189.5	285.58	ug/L	285.58	ppb	20:10:09
1	SiO2†	962843.0	946999.3	61763	ug/L	61763	ppb	20:11:37
2	Sc Radial	5631.0	5631.0	107	%			20:09:11
2	Y RADIAL	6733.6	6733.6	121.9	%			20:09:11
2	Al 396.153Radial†	34091.5	32041.2	25881	ug/L	25881	ppb	20:09:11
2	Ca 317.933Radial†	3479.1	3238.2	5390.5	ug/L	5390.5	ppb	20:09:31
2	Fe 238.204 Radial†	8073.7	7552.8	72422	ug/L	72422	ppb	20:09:11
2	K 766.490 Radial†	26843.7	22483.9	4057.1	ug/L	4057.1	ppb	20:09:11
2	Mg 279.077 IEC†	110.4	102.1	3821.8	ug/L	3821.8	ppb	20:09:31
2	Na 589.592 Radial†	4153.8	4478.6	1363.9	ug/L	1363.9	ppb	20:09:11
2	Sr 421.552†	8283.5	7692.6	47.341	ug/L	47.341	ppb	20:09:11
2	Sc 361.383	1005247.8	1005247.8	101.34	%			20:10:35
2	Y 371.029	984892.8	984892.8	114.53	%			20:10:35
2	Ag 328.068†	-4650.1	-4963.3	2.7143	ug/L	2.7143	ppb	20:10:40
2	As 188.979†	-40.3	-3.3	40.176	ug/L	40.176	ppb	20:11:00
2	B 249.677†	674.1	1006.3	11.301	ug/L	11.301	ppb	20:10:40
2	Ba 233.527†	28132.0	27777.2	227.62	ug/L	227.62	ppb	20:10:40
2	Be 313.107†	-14122.8	-9134.0	3.1272	ug/L	3.1272	ppb	20:10:40
2	Cd 226.502†	566.3	742.3	0.9262	ug/L	0.9262	ppb	20:11:00
2	Co 228.616†	651.4	711.9	8.0977	ug/L	8.0977	ppb	20:11:00
2	Cr 267.716†	27650.3	27216.3	289.54	ug/L	289.54	ppb	20:10:40
2	Cu 324.752†	17665.0	8461.9	27.825	ug/L	27.825	ppb	20:10:40
2	Mn 257.610†	1403463.9	1384378.0	1562.8	ug/L	1562.8	ppb	20:10:35
2	Mo 202.031†	506.4	489.1	39.275	ug/L	39.275	ppb	20:11:00
2	Ni 231.604†	7069.1	6895.4	166.89	ug/L	166.89	ppb	20:11:00

2	P 214.914†	1083.6	820.6	396.94	ug/L	396.94 ppb	20:11:00
2	Pb 220.353†	264.8	306.5	35.628	ug/L	35.628 ppb	20:11:00
2	S 181.975 Axial†	287.6	241.1	318.92	ug/L	318.92 ppb	20:11:00
2	Sb 206.836†	73.5	37.7	4.8313	ug/L	4.8313 ppb	20:11:00
2	Se 196.026†	-363.6	-335.1	57.679	ug/L	57.679 ppb	20:11:00
2	Si 251.611†	958848.6	945795.0	28891	ug/L	28891 ppb	20:10:35
2	Sn 189.927†	3.9	2.7	2.5264	ug/L	2.5264 ppb	20:11:00
2	Ti 334.940†	1900052.9	1876000.4	2845.8	ug/L	2845.8 ppb	20:10:35
2	Tl 190.801†	-145.3	-98.4	-0.9715	ug/L	-0.9715 ppb	20:11:00
2	U 409.014†	-10066.9	-7140.3	-191.18	ug/L	-191.18 ppb	20:10:35
2	V 292.402†	8070.7	9430.5	47.895	ug/L	47.895 ppb	20:10:40
2	Zn 213.857†	33857.8	32490.3	288.46	ug/L	288.46 ppb	20:10:40
2	SiO2†	967733.6	954568.7	62256	ug/L	62256 ppb	20:11:43
3	Sc Radial	5717.9	5717.9	108	%		20:09:36
3	Y RADIAL	6811.5	6811.5	123.3	%		20:09:36
3	Al 396.153Radial†	34374.5	31816.9	25700	ug/L	25700 ppb	20:09:36
3	Ca 317.933Radial†	3477.4	3187.2	5305.5	ug/L	5305.5 ppb	20:09:56
3	Fe 238.204 Radial†	8200.9	7555.2	72445	ug/L	72445 ppb	20:09:36
3	K 766.490 Radial†	27016.7	22261.4	4016.9	ug/L	4016.9 ppb	20:09:36
3	Mg 279.077 IEC†	115.6	105.3	3944.8	ug/L	3944.8 ppb	20:09:56
3	Na 589.592 Radial†	4234.3	4493.7	1368.5	ug/L	1368.5 ppb	20:09:36
3	Sr 421.552†	8409.7	7691.1	47.332	ug/L	47.332 ppb	20:09:36
3	Sc 361.383	1010588.1	1010588.1	101.88	%		20:11:06
3	Y 371.029	988696.6	988696.6	114.97	%		20:11:06
3	Ag 328.068†	-4618.1	-4907.6	2.9538	ug/L	2.9538 ppb	20:11:11
3	As 188.979†	-36.5	0.7	41.817	ug/L	41.817 ppb	20:11:31
3	B 249.677†	614.1	943.9	9.8626	ug/L	9.8626 ppb	20:11:11
3	Ba 233.527†	28147.4	27645.7	226.56	ug/L	226.56 ppb	20:11:11
3	Be 313.107†	-14015.9	-8955.5	3.1949	ug/L	3.1949 ppb	20:11:11
3	Cd 226.502†	589.0	761.7	1.1421	ug/L	1.1421 ppb	20:11:31
3	Co 228.616†	674.2	730.8	8.4946	ug/L	8.4946 ppb	20:11:31
3	Cr 267.716†	27653.6	27075.3	288.05	ug/L	288.05 ppb	20:11:11
3	Cu 324.752†	17801.5	8503.7	27.942	ug/L	27.942 ppb	20:11:11
3	Mn 257.610†	1412380.2	1385811.6	1564.5	ug/L	1564.5 ppb	20:11:06
3	Mo 202.031†	504.2	484.4	38.949	ug/L	38.949 ppb	20:11:31
3	Ni 231.604†	7140.4	6928.5	167.69	ug/L	167.69 ppb	20:11:31
3	P 214.914†	1101.5	832.6	403.49	ug/L	403.49 ppb	20:11:31
3	Pb 220.353†	262.6	302.9	35.157	ug/L	35.157 ppb	20:11:31
3	S 181.975 Axial†	285.1	237.1	313.65	ug/L	313.65 ppb	20:11:31
3	Sb 206.836†	76.3	40.1	5.5966	ug/L	5.5966 ppb	20:11:31
3	Se 196.026†	-358.8	-328.5	61.355	ug/L	61.355 ppb	20:11:31
3	Si 251.611†	964631.9	946471.8	28912	ug/L	28912 ppb	20:11:06
3	Sn 189.927†	6.5	5.2	2.9737	ug/L	2.9737 ppb	20:11:31
3	Ti 334.940†	1910908.2	1876747.7	2846.9	ug/L	2846.9 ppb	20:11:06
3	Tl 190.801†	-148.9	-101.2	-1.8598	ug/L	-1.8598 ppb	20:11:31
3	U 409.014†	-9959.9	-6982.8	-187.16	ug/L	-187.16 ppb	20:11:06
3	V 292.402†	8031.8	9350.1	47.373	ug/L	47.373 ppb	20:11:11
3	Zn 213.857†	33965.0	32419.0	287.80	ug/L	287.80 ppb	20:11:11
3	SiO2†	957405.1	939383.9	61266	ug/L	61266 ppb	20:11:49

Mean Data: 244228005|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1007998.2	101.61	%	0.270				0.27%
Sc Radial	5625.6	107	%	1.8				1.69%
Y 371.029	986208.6	114.68	%	0.251				0.22%
Y RADIAL	6721.8	121.7	%	1.74				1.43%
Ag 328.068†	-4903.9	3.1173	ug/L	0.50493	3.1173	ppb	0.50493	16.20%
Al 396.153Radial†	32132.4	25955	ug/L	298.6	25955	ppb	298.6	1.15%
As 188.979†	-3.6	40.177	ug/L	1.6398	40.177	ppb	1.6398	4.08%
B 249.677†	993.0	10.917	ug/L	0.9242	10.917	ppb	0.9242	8.47%
Ba 233.527†	27630.4	226.45	ug/L	1.236	226.45	ppb	1.236	0.55%
Be 313.107†	-8929.7	3.2059	ug/L	0.08469	3.2059	ppb	0.08469	2.64%
Ca 317.933Radial†	3247.9	5406.6	ug/L	109.97	5406.6	ppb	109.97	2.03%
Cd 226.502†	747.3	0.9333	ug/L	0.20534	0.9333	ppb	0.20534	22.00%
Co 228.616†	717.2	8.2004	ug/L	0.25860	8.2004	ppb	0.25860	3.15%
Cr 267.716†	27069.6	288.00	ug/L	1.570	288.00	ppb	1.570	0.55%
Cu 324.752†	8451.5	27.820	ug/L	0.1242	27.820	ppb	0.1242	0.45%
Fe 238.204 Radial†	7602.3	72897	ug/L	802.6	72897	ppb	802.6	1.10%
K 766.490 Radial†	22541.4	4067.4	ug/L	56.44	4067.4	ppb	56.44	1.39%

Mg 279.077 IEC†	103.8	3887.8	ug/L	62.02	3887.8	ppb	62.02	1.60%
Mn 257.610†	1386464.6	1565.2	ug/L	2.86	1565.2	ppb	2.86	0.18%
Mo 202.031†	488.7	39.283	ug/L	0.3387	39.283	ppb	0.3387	0.86%
Na 589.592 Radial†	4521.0	1376.9	ug/L	18.52	1376.9	ppb	18.52	1.34%
Ni 231.604†	6910.2	167.25	ug/L	0.407	167.25	ppb	0.407	0.24%
P 214.914†	824.6	398.80	ug/L	4.087	398.80	ppb	4.087	1.02%
Pb 220.353†	304.3	35.332	ug/L	0.2580	35.332	ppb	0.2580	0.73%
S 181.975 Axial†	238.8	315.88	ug/L	2.729	315.88	ppb	2.729	0.86%
Sb 206.836†	38.8	5.1814	ug/L	0.38681	5.1814	ppb	0.38681	7.47%
Se 196.026†	-329.4	62.342	ug/L	5.2267	62.342	ppb	5.2267	8.38%
Si 251.611†	946510.9	28913	ug/L	22.5	28913	ppb	22.5	0.08%
Sn 189.927†	3.0	2.5923	ug/L	0.35302	2.5923	ppb	0.35302	13.62%
Sr 421.552†	7729.2	47.566	ug/L	0.3984	47.566	ppb	0.3984	0.84%
Ti 334.940†	1877200.7	2847.6	ug/L	2.26	2847.6	ppb	2.26	0.08%
Tl 190.801†	-94.3	0.3595	ug/L	3.10668	0.3595	ppb	3.10668	864.05%
U 409.014†	-7094.9	-190.08	ug/L	2.548	-190.08	ppb	2.548	1.34%
V 292.402†	9358.9	47.362	ug/L	0.5389	47.362	ppb	0.5389	1.14%
Zn 213.857†	32366.2	287.28	ug/L	1.511	287.28	ppb	1.511	0.53%
SiO2†	946984.0	61762	ug/L	495.2	61762	ppb	495.2	0.80%

Sequence No.: 25
Sample ID: 244228006|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 1/29/2010 20:14:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 244228006|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5264.6	5264.6	99.8	%			20:15:53
1	Y RADIAL	6154.1	6154.1	111.4	%			20:15:53
1	Al 396.153Radial†	46501.8	46697.1	37722	ug/L	37722	ppb	20:15:53
1	Ca 317.933Radial†	6812.6	6804.8	11328	ug/L	11328	ppb	20:15:53
1	Fe 238.204 Radial†	8582.3	8588.6	82354	ug/L	82354	ppb	20:15:53
1	K 766.490 Radial†	39846.0	37260.5	6723.5	ug/L	6723.5	ppb	20:15:53
1	Mg 279.077 IEC†	202.4	201.5	7605.6	ug/L	7605.6	ppb	20:16:13
1	Na 589.592 Radial†	1415.7	2006.0	610.92	ug/L	610.92	ppb	20:15:53
1	Sr 421.552†	14210.1	14170.4	87.195	ug/L	87.195	ppb	20:15:53
1	Sc 361.383	1001101.1	1001101.1	100.92	%			20:17:11
1	Y 371.029	945501.3	945501.3	109.95	%			20:17:11
1	Ag 328.068†	-4589.0	-4921.7	6.0766	ug/L	6.0766	ppb	20:17:16
1	As 188.979†	-58.9	-21.9	32.407	ug/L	32.407	ppb	20:17:36
1	B 249.677†	791.8	1125.7	12.412	ug/L	12.412	ppb	20:17:16
1	Ba 233.527†	54842.0	54359.0	443.58	ug/L	443.58	ppb	20:17:16
1	Be 313.107†	-10794.8	-5894.0	3.6414	ug/L	3.6414	ppb	20:17:16
1	Cd 226.502†	609.2	787.2	0.3605	ug/L	0.3605	ppb	20:17:36
1	Co 228.616†	933.8	994.4	14.636	ug/L	14.636	ppb	20:17:36
1	Cr 267.716†	13343.7	13152.9	140.94	ug/L	140.94	ppb	20:17:16
1	Cu 324.752†	26211.6	17002.9	52.423	ug/L	52.423	ppb	20:17:16
1	Mn 257.610†	1771359.3	1754660.1	1979.8	ug/L	1979.8	ppb	20:17:11
1	Mo 202.031†	29.6	18.8	7.8169	ug/L	7.8169	ppb	20:17:36
1	Ni 231.604†	3257.1	3147.0	76.159	ug/L	76.159	ppb	20:17:36
1	P 214.914†	1560.1	1297.2	650.43	ug/L	650.43	ppb	20:17:36
1	Pb 220.353†	628.6	668.0	80.695	ug/L	80.695	ppb	20:17:36
1	S 181.975 Axial†	361.7	315.6	416.84	ug/L	416.84	ppb	20:17:36
1	Sb 206.836†	64.2	28.8	2.0553	ug/L	2.0553	ppb	20:17:36
1	Se 196.026†	-362.2	-335.2	91.083	ug/L	91.083	ppb	20:17:36
1	Si 251.611†	977112.0	967811.3	29564	ug/L	29564	ppb	20:17:11
1	Sn 189.927†	-53.6	-54.2	-6.7331	ug/L	-6.7331	ppb	20:17:36
1	Ti 334.940†	1696451.1	1682018.9	2552.1	ug/L	2552.1	ppb	20:17:11
1	Tl 190.801†	-144.1	-97.8	-1.3006	ug/L	-1.3006	ppb	20:17:36
1	U 409.014†	-7072.8	-4214.6	-117.29	ug/L	-117.29	ppb	20:17:11
1	V 292.402†	12293.4	13647.7	74.015	ug/L	74.015	ppb	20:17:16
1	Zn 213.857†	33484.0	32258.3	285.92	ug/L	285.92	ppb	20:17:16
1	SiO2†	988128.5	978733.4	63833	ug/L	63833	ppb	20:18:44
2	Sc Radial	5704.4	5704.4	108	%			20:16:18
2	Y RADIAL	6567.9	6567.9	118.9	%			20:16:18
2	Al 396.153Radial†	44485.0	41240.5	33314	ug/L	33314	ppb	20:16:18
2	Ca 317.933Radial†	6558.2	6043.5	10060	ug/L	10060	ppb	20:16:18
2	Fe 238.204 Radial†	8235.4	7604.9	72922	ug/L	72922	ppb	20:16:18
2	K 766.490 Radial†	38713.0	33135.3	5979.1	ug/L	5979.1	ppb	20:16:18
2	Mg 279.077 IEC†	202.2	185.6	7011.4	ug/L	7011.4	ppb	20:16:38
2	Na 589.592 Radial†	1332.9	1820.1	554.30	ug/L	554.30	ppb	20:16:18
2	Sr 421.552†	13606.0	12514.2	77.004	ug/L	77.004	ppb	20:16:18
2	Sc 361.383	1010301.5	1010301.5	101.85	%			20:17:42
2	Y 371.029	955364.5	955364.5	111.09	%			20:17:42
2	Ag 328.068†	-4724.0	-5012.8	2.6531	ug/L	2.6531	ppb	20:17:47
2	As 188.979†	-49.5	-12.1	34.185	ug/L	34.185	ppb	20:18:07
2	B 249.677†	764.0	1091.2	13.152	ug/L	13.152	ppb	20:17:47
2	Ba 233.527†	55480.6	54491.1	444.36	ug/L	444.36	ppb	20:17:47
2	Be 313.107†	-11029.8	-6027.4	3.5839	ug/L	3.5839	ppb	20:17:47
2	Cd 226.502†	603.7	776.3	1.2122	ug/L	1.2122	ppb	20:18:07
2	Co 228.616†	943.0	994.9	14.791	ug/L	14.791	ppb	20:18:07
2	Cr 267.716†	13517.1	13202.8	141.28	ug/L	141.28	ppb	20:17:47
2	Cu 324.752†	26630.2	17177.3	52.416	ug/L	52.416	ppb	20:17:47
2	Mn 257.610†	1785238.0	1752303.3	1976.3	ug/L	1976.3	ppb	20:17:42
2	Mo 202.031†	20.2	9.3	6.4177	ug/L	6.4177	ppb	20:18:07
2	Ni 231.604†	3262.8	3123.2	75.582	ug/L	75.582	ppb	20:18:07

2	P 214.914†	1573.6	1296.4	656.39 ug/L	656.39 ppb	20:18:07
2	Pb 220.353†	614.3	648.3	78.252 ug/L	78.252 ppb	20:18:07
2	S 181.975 Axial†	353.2	304.0	402.06 ug/L	402.06 ppb	20:18:07
2	Sb 206.836†	64.5	28.4	1.8597 ug/L	1.8597 ppb	20:18:07
2	Se 196.026†	-367.5	-337.2	58.549 ug/L	58.549 ppb	20:18:07
2	Si 251.611†	983670.8	965434.2	29491 ug/L	29491 ppb	20:17:42
2	Sn 189.927†	-42.3	-42.6	-4.9791 ug/L	-4.9791 ppb	20:18:07
2	Ti 334.940†	1709430.0	1679454.4	2548.1 ug/L	2548.1 ppb	20:17:42
2	Tl 190.801†	-154.6	-106.8	-4.2671 ug/L	-4.2671 ppb	20:18:07
2	U 409.014†	-7121.6	-4198.7	-115.81 ug/L	-115.81 ppb	20:17:42
2	V 292.402†	12446.5	13687.1	75.629 ug/L	75.629 ppb	20:17:47
2	Zn 213.857†	33791.5	32258.1	286.84 ug/L	286.84 ppb	20:17:47
2	SiO2†	978659.2	960519.4	62645 ug/L	62645 ppb	20:18:50
3	Sc Radial	5714.4	5714.4	108 %		20:16:43
3	Y RADIAL	6565.4	6565.4	118.9 %		20:16:43
3	Al 396.153Radial†	44600.9	41275.8	33343 ug/L	33343 ppb	20:16:43
3	Ca 317.933Radial†	6561.5	6035.9	10048 ug/L	10048 ppb	20:16:43
3	Fe 238.204 Radial†	8243.3	7598.9	72865 ug/L	72865 ppb	20:16:43
3	K 766.490 Radial†	38615.4	32982.7	5951.5 ug/L	5951.5 ppb	20:16:43
3	Mg 279.077 IEC†	204.0	186.9	7060.2 ug/L	7060.2 ppb	20:17:03
3	Na 589.592 Radial†	1351.7	1835.4	558.95 ug/L	558.95 ppb	20:16:43
3	Sr 421.552†	13615.0	12500.5	76.920 ug/L	76.920 ppb	20:16:43
3	Sc 361.383	1009456.9	1009456.9	101.76 %		20:18:13
3	Y 371.029	954135.3	954135.3	110.95 %		20:18:13
3	Ag 328.068†	-4592.2	-4887.2	3.1679 ug/L	3.1679 ppb	20:18:18
3	As 188.979†	-40.6	-3.4	37.722 ug/L	37.722 ppb	20:18:38
3	B 249.677†	812.4	1139.5	14.271 ug/L	14.271 ppb	20:18:18
3	Ba 233.527†	54965.1	54030.1	440.62 ug/L	440.62 ppb	20:18:18
3	Be 313.107†	-10823.9	-5834.1	3.6510 ug/L	3.6510 ppb	20:18:18
3	Cd 226.502†	594.1	767.3	1.1171 ug/L	1.1171 ppb	20:18:38
3	Co 228.616†	916.1	969.3	14.253 ug/L	14.253 ppb	20:18:38
3	Cr 267.716†	13412.8	13111.4	140.32 ug/L	140.32 ppb	20:18:18
3	Cu 324.752†	26273.5	16848.6	51.486 ug/L	51.486 ppb	20:18:18
3	Mn 257.610†	1785517.5	1754044.4	1978.2 ug/L	1978.2 ppb	20:18:13
3	Mo 202.031†	24.0	13.0	6.6696 ug/L	6.6696 ppb	20:18:38
3	Ni 231.604†	3241.4	3104.9	75.140 ug/L	75.140 ppb	20:18:38
3	P 214.914†	1551.3	1275.8	645.25 ug/L	645.25 ppb	20:18:38
3	Pb 220.353†	609.7	644.3	77.790 ug/L	77.790 ppb	20:18:38
3	S 181.975 Axial†	346.9	298.2	394.22 ug/L	394.22 ppb	20:18:38
3	Sb 206.836†	67.7	31.7	2.8951 ug/L	2.8951 ppb	20:18:38
3	Se 196.026†	-362.9	-332.9	60.673 ug/L	60.673 ppb	20:18:38
3	Si 251.611†	983678.2	966249.5	29516 ug/L	29516 ppb	20:18:13
3	Sn 189.927†	-46.3	-46.6	-5.6954 ug/L	-5.6954 ppb	20:18:38
3	Ti 334.940†	1706973.8	1678444.9	2546.6 ug/L	2546.6 ppb	20:18:13
3	Tl 190.801†	-150.0	-102.3	-2.8301 ug/L	-2.8301 ppb	20:18:38
3	U 409.014†	-7224.0	-4305.1	-118.52 ug/L	-118.52 ppb	20:18:13
3	V 292.402†	12356.5	13608.9	75.130 ug/L	75.130 ppb	20:18:18
3	Zn 213.857†	33647.8	32144.7	285.81 ug/L	285.81 ppb	20:18:18
3	SiO2†	984913.1	967468.9	63099 ug/L	63099 ppb	20:18:56

Mean Data: 244228006|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1006953.2	101.51	%	0.513				0.51%
Sc Radial	5561.1	105	%	4.9				4.62%
Y 371.029	951667.1	110.66	%	0.625				0.56%
Y RADIAL	6429.1	116.4	%	4.31				3.71%
Ag 328.068†	-4940.6	3.9658	ug/L	1.84600	3.9658	ppb	1.84600	46.55%
Al 396.153Radial†	43071.1	34793	ug/L	2536.7	34793	ppb	2536.7	7.29%
As 188.979†	-12.4	34.771	ug/L	2.7058	34.771	ppb	2.7058	7.78%
B 249.677†	1118.8	13.278	ug/L	0.9360	13.278	ppb	0.9360	7.05%
Ba 233.527†	54293.4	442.85	ug/L	1.973	442.85	ppb	1.973	0.45%
Be 313.107†	-5918.5	3.6254	ug/L	0.03627	3.6254	ppb	0.03627	1.00%
Ca 317.933Radial†	6294.7	10479	ug/L	735.4	10479	ppb	735.4	7.02%
Cd 226.502†	776.9	0.8966	ug/L	0.46668	0.8966	ppb	0.46668	52.05%
Co 228.616†	986.2	14.560	ug/L	0.2771	14.560	ppb	0.2771	1.90%
Cr 267.716†	13155.7	140.85	ug/L	0.490	140.85	ppb	0.490	0.35%
Cu 324.752†	17009.6	52.108	ug/L	0.5387	52.108	ppb	0.5387	1.03%
Fe 238.204 Radial†	7930.8	76047	ug/L	5462.4	76047	ppb	5462.4	7.18%
K 766.490 Radial†	34459.5	6218.0	ug/L	437.99	6218.0	ppb	437.99	7.04%

Mg 279.077 IEC†	191.3	7225.7	ug/L	329.84	7225.7	ppb	329.84	4.56%
Mn 257.610†	1753669.3	1978.1	ug/L	1.78	1978.1	ppb	1.78	0.09%
Mo 202.031†	13.7	6.9681	ug/L	0.74582	6.9681	ppb	0.74582	10.70%
Na 589.592 Radial†	1887.2	574.72	ug/L	31.431	574.72	ppb	31.431	5.47%
Ni 231.604†	3125.0	75.627	ug/L	0.5108	75.627	ppb	0.5108	0.68%
P 214.914†	1289.8	650.69	ug/L	5.577	650.69	ppb	5.577	0.86%
Pb 220.353†	653.5	78.912	ug/L	1.5612	78.912	ppb	1.5612	1.98%
S 181.975 Axial†	306.0	404.37	ug/L	11.489	404.37	ppb	11.489	2.84%
Sb 206.836†	29.6	2.2700	ug/L	0.55007	2.2700	ppb	0.55007	24.23%
Se 196.026†	-335.1	70.102	ug/L	18.2012	70.102	ppb	18.2012	25.96%
Si 251.611†	966498.4	29524	ug/L	36.9	29524	ppb	36.9	0.12%
Sn 189.927†	-47.8	-5.8025	ug/L	0.88189	-5.8025	ppb	0.88189	15.20%
Sr 421.552†	13061.7	80.373	ug/L	5.9084	80.373	ppb	5.9084	7.35%
Ti 334.940†	1679972.7	2548.9	ug/L	2.86	2548.9	ppb	2.86	0.11%
Tl 190.801†	-102.3	-2.7993	ug/L	1.48349	-2.7993	ppb	1.48349	53.00%
U 409.014†	-4239.5	-117.21	ug/L	1.356	-117.21	ppb	1.356	1.16%
V 292.402†	13647.9	74.924	ug/L	0.8265	74.924	ppb	0.8265	1.10%
Zn 213.857†	32220.4	286.19	ug/L	0.563	286.19	ppb	0.563	0.20%
SiO2†	968907.3	63193	ug/L	599.5	63193	ppb	599.5	0.95%

Sequence No.: 26
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/29/2010 20:21:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5550.8	5550.8	105	%			20:22:59
1	Y RADIAL	5805.6	5805.6	105.1	%			20:22:59
1	Al 396.153Radial†	6219.6	6017.1	4836.0	ug/L	4836.0	ppb	20:22:59
1	Ca 317.933Radial†	3178.7	2999.9	4993.7	ug/L	4993.7	ppb	20:23:19
1	Fe 238.204 Radial†	580.5	541.6	5208.3	ug/L	5208.3	ppb	20:23:19
1	K 766.490 Radial†	32208.0	27944.5	5039.5	ug/L	5039.5	ppb	20:22:59
1	Mg 279.077 IEC†	149.4	140.6	5367.9	ug/L	5367.9	ppb	20:23:19
1	Na 589.592 Radial†	35591.9	34408.9	10479	ug/L	10479	ppb	20:22:59
1	Sr 421.552†	87381.4	82967.6	510.99	ug/L	510.99	ppb	20:22:59
1	Sc 361.383	986125.9	986125.9	99.409	%			20:24:16
1	Y 371.029	846630.9	846630.9	98.450	%			20:24:16
1	Ag 328.068†	119391.5	119726.4	511.34	ug/L	511.34	ppb	20:24:21
1	As 188.979†	1199.2	1242.8	515.20	ug/L	515.20	ppb	20:24:42
1	B 249.677†	21583.1	22052.4	504.03	ug/L	504.03	ppb	20:24:21
1	Ba 233.527†	62238.2	62624.4	509.19	ug/L	509.19	ppb	20:24:21
1	Be 313.107†	1387999.3	1401049.6	512.33	ug/L	512.33	ppb	20:24:16
1	Cd 226.502†	44943.5	45394.1	509.65	ug/L	509.65	ppb	20:24:21
1	Co 228.616†	23835.8	24046.5	508.32	ug/L	508.32	ppb	20:24:21
1	Cr 267.716†	47831.3	48046.2	508.99	ug/L	508.99	ppb	20:24:21
1	Cu 324.752†	187835.1	179981.2	508.13	ug/L	508.13	ppb	20:24:21
1	Mn 257.610†	452110.2	454226.6	510.78	ug/L	510.78	ppb	20:24:16
1	Mo 202.031†	7357.0	7390.2	507.96	ug/L	507.96	ppb	20:24:42
1	Ni 231.604†	21083.2	21128.0	511.09	ug/L	511.09	ppb	20:24:21
1	P 214.914†	4787.8	4567.5	2425.4	ug/L	2425.4	ppb	20:24:42
1	Pb 220.353†	4142.7	4212.4	508.06	ug/L	508.06	ppb	20:24:42
1	S 181.975 Axial†	808.1	770.2	1033.4	ug/L	1033.4	ppb	20:24:42
1	Sb 206.836†	1585.5	1560.1	519.38	ug/L	519.38	ppb	20:24:42
1	Se 196.026†	905.2	934.3	530.90	ug/L	530.90	ppb	20:24:42
1	Si 251.611†	83264.9	83356.1	2540.1	ug/L	2540.1	ppb	20:24:21
1	Sn 189.927†	2753.0	2768.3	502.99	ug/L	502.99	ppb	20:24:42
1	Ti 334.940†	326137.4	329090.0	498.97	ug/L	498.97	ppb	20:24:21
1	Tl 190.801†	1517.7	1571.7	512.02	ug/L	512.02	ppb	20:24:42
1	U 409.014†	17155.5	20051.2	510.16	ug/L	510.16	ppb	20:24:21
1	V 292.402†	76194.3	78113.3	515.05	ug/L	515.05	ppb	20:24:21
1	Zn 213.857†	56288.8	55702.5	504.02	ug/L	504.02	ppb	20:24:21
1	SiO2†	82372.5	82464.3	5364.5	ug/L	5364.5	ppb	20:25:49
2	Sc Radial	5663.6	5663.6	107	%			20:23:24
2	Y RADIAL	5920.0	5920.0	107.2	%			20:23:24
2	Al 396.153Radial†	6348.7	6019.6	4838.3	ug/L	4838.3	ppb	20:23:24
2	Ca 317.933Radial†	3181.5	2942.3	4897.9	ug/L	4897.9	ppb	20:23:44
2	Fe 238.204 Radial†	575.9	526.3	5061.4	ug/L	5061.4	ppb	20:23:44
2	K 766.490 Radial†	32568.3	27670.2	4990.1	ug/L	4990.1	ppb	20:23:24
2	Mg 279.077 IEC†	143.8	132.6	5061.2	ug/L	5061.2	ppb	20:23:44
2	Na 589.592 Radial†	36220.5	34320.5	10452	ug/L	10452	ppb	20:23:24
2	Sr 421.552†	89200.7	83007.5	511.23	ug/L	511.23	ppb	20:23:24
2	Sc 361.383	991413.8	991413.8	99.942	%			20:24:47
2	Y 371.029	850331.3	850331.3	98.880	%			20:24:47
2	Ag 328.068†	118013.6	117707.2	502.70	ug/L	502.70	ppb	20:24:53
2	As 188.979†	1186.6	1223.8	507.27	ug/L	507.27	ppb	20:25:13
2	B 249.677†	21348.3	21701.7	496.02	ug/L	496.02	ppb	20:24:53
2	Ba 233.527†	61511.3	61563.2	500.56	ug/L	500.56	ppb	20:24:53
2	Be 313.107†	1394924.5	1400531.7	512.12	ug/L	512.12	ppb	20:24:47
2	Cd 226.502†	44621.1	44830.4	503.32	ug/L	503.32	ppb	20:24:53
2	Co 228.616†	23619.2	23701.9	501.05	ug/L	501.05	ppb	20:24:53
2	Cr 267.716†	47295.1	47253.1	500.59	ug/L	500.59	ppb	20:24:53
2	Cu 324.752†	184372.2	175508.4	495.51	ug/L	495.51	ppb	20:24:53
2	Mn 257.610†	454817.9	454510.1	511.10	ug/L	511.10	ppb	20:24:47
2	Mo 202.031†	7325.6	7319.2	503.08	ug/L	503.08	ppb	20:25:13
2	Ni 231.604†	20808.4	20740.0	501.70	ug/L	501.70	ppb	20:24:53

2	P 214.914†	4796.9	4551.0	2418.8 ug/L	2418.8 ppb	20:25:13
2	Pb 220.353†	4133.5	4181.0	504.28 ug/L	504.28 ppb	20:25:13
2	S 181.975 Axial†	797.1	754.8	1012.8 ug/L	1012.8 ppb	20:25:13
2	Sb 206.836†	1594.9	1560.9	519.48 ug/L	519.48 ppb	20:25:13
2	Se 196.026†	899.8	924.0	524.77 ug/L	524.77 ppb	20:25:13
2	Si 251.611†	82140.6	81784.4	2492.1 ug/L	2492.1 ppb	20:24:53
2	Sn 189.927†	2749.1	2749.6	499.59 ug/L	499.59 ppb	20:25:13
2	Ti 334.940†	321169.0	322368.9	488.80 ug/L	488.80 ppb	20:24:53
2	Tl 190.801†	1510.2	1556.1	506.94 ug/L	506.94 ppb	20:25:13
2	U 409.014†	16601.5	19404.9	493.69 ug/L	493.69 ppb	20:24:53
2	V 292.402†	75082.8	76592.4	505.08 ug/L	505.08 ppb	20:24:53
2	Zn 213.857†	55772.1	54883.5	496.63 ug/L	496.63 ppb	20:24:53
2	SiO2†	82048.9	81698.6	5314.7 ug/L	5314.7 ppb	20:25:54
3	Sc Radial	5575.4	5575.4	106 %		20:23:49
3	Y RADIAL	5788.0	5788.0	104.8 %		20:23:49
3	Al 396.153Radial†	6212.5	5984.3	4809.4 ug/L	4809.4 ppb	20:23:49
3	Ca 317.933Radial†	3168.4	2976.7	4955.2 ug/L	4955.2 ppb	20:24:09
3	Fe 238.204 Radial†	576.2	535.1	5146.4 ug/L	5146.4 ppb	20:24:09
3	K 766.490 Radial†	32109.5	27716.0	4998.3 ug/L	4998.3 ppb	20:23:49
3	Mg 279.077 IEC†	147.0	137.7	5256.5 ug/L	5256.5 ppb	20:24:09
3	Na 589.592 Radial†	35552.6	34222.2	10422 ug/L	10422 ppb	20:23:49
3	Sr 421.552†	87116.9	82350.3	507.18 ug/L	507.18 ppb	20:23:49
3	Sc 361.383	984156.8	984156.8	99.211 %		20:25:18
3	Y 371.029	843694.5	843694.5	98.109 %		20:25:18
3	Ag 328.068†	121241.3	121831.3	520.28 ug/L	520.28 ppb	20:25:24
3	As 188.979†	1200.5	1246.6	516.79 ug/L	516.79 ppb	20:25:44
3	B 249.677†	22041.0	22557.4	515.61 ug/L	515.61 ppb	20:25:24
3	Ba 233.527†	63061.1	63579.1	516.95 ug/L	516.95 ppb	20:25:24
3	Be 313.107†	1387352.1	1403190.8	513.13 ug/L	513.13 ppb	20:25:18
3	Cd 226.502†	45500.5	46046.0	516.98 ug/L	516.98 ppb	20:25:24
3	Co 228.616†	24191.3	24452.8	516.90 ug/L	516.90 ppb	20:25:24
3	Cr 267.716†	48448.6	48764.8	516.60 ug/L	516.60 ppb	20:25:24
3	Cu 324.752†	190708.0	183254.9	517.37 ug/L	517.37 ppb	20:25:24
3	Mn 257.610†	452279.2	455306.8	511.99 ug/L	511.99 ppb	20:25:18
3	Mo 202.031†	7381.0	7429.1	510.63 ug/L	510.63 ppb	20:25:44
3	Ni 231.604†	21308.0	21397.1	517.60 ug/L	517.60 ppb	20:25:24
3	P 214.914†	4812.4	4602.0	2442.7 ug/L	2442.7 ppb	20:25:44
3	Pb 220.353†	4175.8	4254.1	513.07 ug/L	513.07 ppb	20:25:44
3	S 181.975 Axial†	807.0	770.7	1034.1 ug/L	1034.1 ppb	20:25:44
3	Sb 206.836†	1599.8	1577.6	525.13 ug/L	525.13 ppb	20:25:44
3	Se 196.026†	898.9	929.8	528.20 ug/L	528.20 ppb	20:25:44
3	Si 251.611†	84429.3	84697.3	2581.0 ug/L	2581.0 ppb	20:25:24
3	Sn 189.927†	2770.3	2791.3	507.15 ug/L	507.15 ppb	20:25:44
3	Ti 334.940†	330866.8	334513.5	507.20 ug/L	507.20 ppb	20:25:24
3	Tl 190.801†	1531.8	1589.0	517.64 ug/L	517.64 ppb	20:25:44
3	U 409.014†	17443.0	20375.5	518.43 ug/L	518.43 ppb	20:25:24
3	V 292.402†	77105.6	79185.2	522.07 ug/L	522.07 ppb	20:25:24
3	Zn 213.857†	57073.3	56606.5	512.22 ug/L	512.22 ppb	20:25:24
3	SiO2†	81596.8	81848.2	5324.3 ug/L	5324.3 ppb	20:25:59

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	987232.2	99.521	%	0.3783				0.38%
Sc Radial	5596.6	106	%	1.1				1.06%
Y 371.029	846885.6	98.480	%	0.3867				0.39%
Y RADIAL	5837.9	105.7	%	1.30				1.23%
Ag 328.068†	119755.0	511.44	ug/L	8.789	511.44	ppb	8.789	1.72%
QC value within limits for Ag 328.068 Recovery = 102.29%								
Al 396.153Radial†	6007.0	4827.9	ug/L	16.05	4827.9	ppb	16.05	0.33%
QC value within limits for Al 396.153Radial Recovery = 96.56%								
As 188.979†	1237.7	513.09	ug/L	5.104	513.09	ppb	5.104	0.99%
QC value within limits for As 188.979 Recovery = 102.62%								
B 249.677†	22103.8	505.22	ug/L	9.849	505.22	ppb	9.849	1.95%
QC value within limits for B 249.677 Recovery = 101.04%								
Ba 233.527†	62588.9	508.90	ug/L	8.199	508.90	ppb	8.199	1.61%
QC value within limits for Ba 233.527 Recovery = 101.78%								
Be 313.107†	1401590.7	512.53	ug/L	0.534	512.53	ppb	0.534	0.10%
QC value within limits for Be 313.107 Recovery = 102.51%								
Ca 317.933Radial†	2973.0	4948.9	ug/L	48.23	4948.9	ppb	48.23	0.97%

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   QC value within limits for Ca 317.933Radial  Recovery = 98.98%
Cd 226.502†            45423.5      509.98 ug/L        6.835      509.98 ppb        6.835   1.34%
   QC value within limits for Cd 226.502  Recovery = 102.00%
Co 228.616†            24067.0      508.76 ug/L        7.933      508.76 ppb        7.933   1.56%
   QC value within limits for Co 228.616  Recovery = 101.75%
Cr 267.716†            48021.4      508.73 ug/L        8.008      508.73 ppb        8.008   1.57%
   QC value within limits for Cr 267.716  Recovery = 101.75%
Cu 324.752†           179581.5      507.00 ug/L       10.975      507.00 ppb       10.975   2.16%
   QC value within limits for Cu 324.752  Recovery = 101.40%
Fe 238.204 Radial†       534.3      5138.7 ug/L       73.75      5138.7 ppb        73.75   1.44%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.77%
K 766.490 Radial†      27776.9      5009.3 ug/L       26.51      5009.3 ppb        26.51   0.53%
   QC value within limits for K 766.490 Radial  Recovery = 100.19%
Mg 279.077 IEC†          136.9      5228.6 ug/L      155.23      5228.6 ppb       155.23   2.97%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.57%
Mn 257.610†           454681.2      511.29 ug/L        0.629      511.29 ppb        0.629   0.12%
   QC value within limits for Mn 257.610  Recovery = 102.26%
Mo 202.031†             7379.5      507.23 ug/L        3.831      507.23 ppb        3.831   0.76%
   QC value within limits for Mo 202.031  Recovery = 101.45%
Na 589.592 Radial†     34317.2       10451 ug/L         28.4       10451 ppb         28.4   0.27%
   QC value within limits for Na 589.592 Radial  Recovery = 104.51%
Ni 231.604†            21088.4      510.13 ug/L        7.991      510.13 ppb        7.991   1.57%
   QC value within limits for Ni 231.604  Recovery = 102.03%
P 214.914†              4573.5      2429.0 ug/L       12.32      2429.0 ppb        12.32   0.51%
   QC value within limits for P 214.914  Recovery = 97.16%
Pb 220.353†             4215.8      508.47 ug/L        4.409      508.47 ppb        4.409   0.87%
   QC value within limits for Pb 220.353  Recovery = 101.69%
S 181.975 Axial†         765.2      1026.8 ug/L       12.12      1026.8 ppb        12.12   1.18%
   QC value within limits for S 181.975 Axial  Recovery = 102.68%
Sb 206.836†             1566.2      521.33 ug/L        3.290      521.33 ppb        3.290   0.63%
   QC value within limits for Sb 206.836  Recovery = 104.27%
Se 196.026†              929.4      527.96 ug/L        3.070      527.96 ppb        3.070   0.58%
   QC value within limits for Se 196.026  Recovery = 105.59%
Si 251.611†            83279.2      2537.7 ug/L       44.49      2537.7 ppb        44.49   1.75%
   QC value within limits for Si 251.611  Recovery = 101.51%
Sn 189.927†             2769.7      503.24 ug/L        3.787      503.24 ppb        3.787   0.75%
   QC value within limits for Sn 189.927  Recovery = 100.65%
Sr 421.552†            82775.1      509.80 ug/L        2.269      509.80 ppb        2.269   0.45%
   QC value within limits for Sr 421.552  Recovery = 101.96%
Ti 334.940†           328657.5      498.32 ug/L        9.215      498.32 ppb        9.215   1.85%
   QC value within limits for Ti 334.940  Recovery = 99.66%
Tl 190.801†             1572.3      512.20 ug/L        5.350      512.20 ppb        5.350   1.04%
   QC value within limits for Tl 190.801  Recovery = 102.44%
U 409.014†             19943.9      507.42 ug/L       12.592      507.42 ppb       12.592   2.48%
   QC value within limits for U 409.014  Recovery = 101.48%
V 292.402†             77963.6      514.06 ug/L        8.538      514.06 ppb        8.538   1.66%
   QC value within limits for V 292.402  Recovery = 102.81%
Zn 213.857†            55730.8      504.29 ug/L        7.798      504.29 ppb        7.798   1.55%
   QC value within limits for Zn 213.857  Recovery = 100.86%
SiO2†                  82003.7      5334.5 ug/L       26.43      5334.5 ppb        26.43   0.50%
   QC value within limits for SiO2  Recovery = 99.76%
All analyte(s) passed QC.
```

Sequence No.: 27
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/29/2010 20:28:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5607.3	5607.3	106	%			20:30:01
1	Y RADIAL	5883.7	5883.7	106.5	%			20:30:01
1	Al 396.153Radial†	-123.6	-9.3	-7.5403	ug/L	-7.5403	ppb	20:30:21
1	Ca 317.933Radial†	25.7	3.4	5.7364	ug/L	5.7364	ppb	20:30:21
1	Fe 238.204 Radial†	9.7	-0.9	-8.7474	ug/L	-8.7474	ppb	20:30:21
1	K 766.490 Radial†	2708.6	-113.3	-20.456	ug/L	-20.456	ppb	20:30:01
1	Mg 279.077 IEC†	1.7	0.2	8.1522	ug/L	8.1522	ppb	20:30:21
1	Na 589.592 Radial†	-690.5	-61.9	-18.838	ug/L	-18.838	ppb	20:30:01
1	Sr 421.552†	60.1	-10.2	-0.0627	ug/L	-0.0627	ppb	20:30:01
1	Sc 361.383	990768.5	990768.5	99.877	%			20:31:18
1	Y 371.029	860539.8	860539.8	100.07	%			20:31:18
1	Ag 328.068†	405.5	31.4	0.1358	ug/L	0.1358	ppb	20:31:23
1	As 188.979†	-35.0	1.5	0.6148	ug/L	0.6148	ppb	20:31:43
1	B 249.677†	-73.9	267.1	6.1339	ug/L	6.1339	ppb	20:31:43
1	Ba 233.527†	-2.6	13.8	0.1115	ug/L	0.1115	ppb	20:31:43
1	Be 313.107†	-4599.5	197.3	0.0722	ug/L	0.0722	ppb	20:31:23
1	Cd 226.502†	-170.5	12.8	0.1437	ug/L	0.1437	ppb	20:31:43
1	Co 228.616†	-73.7	-4.7	-0.1000	ug/L	-0.1000	ppb	20:31:43
1	Cr 267.716†	73.0	3.8	0.0424	ug/L	0.0424	ppb	20:31:43
1	Cu 324.752†	8823.6	-135.7	-0.3798	ug/L	-0.3798	ppb	20:31:23
1	Mn 257.610†	580.0	10.6	0.0107	ug/L	0.0107	ppb	20:31:43
1	Mo 202.031†	11.8	1.3	0.0862	ug/L	0.0862	ppb	20:31:43
1	Ni 231.604†	101.0	20.6	0.4998	ug/L	0.4998	ppb	20:31:43
1	P 214.914†	237.5	-10.9	-5.9279	ug/L	-5.9279	ppb	20:31:43
1	Pb 220.353†	-38.5	6.6	0.7965	ug/L	0.7965	ppb	20:31:43
1	S 181.975 Axial†	39.9	-2.8	-3.8002	ug/L	-3.8002	ppb	20:31:43
1	Sb 206.836†	43.4	8.6	2.8009	ug/L	2.8009	ppb	20:31:43
1	Se 196.026†	-16.6	7.1	3.8363	ug/L	3.8363	ppb	20:31:43
1	Si 251.611†	497.1	94.1	2.8740	ug/L	2.8740	ppb	20:31:43
1	Sn 189.927†	14.6	13.5	2.4514	ug/L	2.4514	ppb	20:31:43
1	Ti 334.940†	-963.0	50.5	0.0797	ug/L	0.0797	ppb	20:31:23
1	Tl 190.801†	-41.5	3.5	1.1390	ug/L	1.1390	ppb	20:31:43
1	U 409.014†	-3057.2	-267.1	-6.8186	ug/L	-6.8186	ppb	20:31:23
1	V 292.402†	-1472.6	-8.1	-0.0635	ug/L	-0.0635	ppb	20:31:23
1	Zn 213.857†	1024.1	104.6	0.9528	ug/L	0.9528	ppb	20:31:43
1	SiO2†	509.5	112.4	7.3309	ug/L	7.3309	ppb	20:33:04
2	Sc Radial	5542.6	5542.6	105	%			20:30:26
2	Y RADIAL	5806.5	5806.5	105.1	%			20:30:26
2	Al 396.153Radial†	-112.7	-0.4	-0.3139	ug/L	-0.3139	ppb	20:30:46
2	Ca 317.933Radial†	22.9	1.1	1.8034	ug/L	1.8034	ppb	20:30:46
2	Fe 238.204 Radial†	8.7	-1.8	-17.503	ug/L	-17.503	ppb	20:30:46
2	K 766.490 Radial†	2712.9	-79.4	-14.331	ug/L	-14.331	ppb	20:30:26
2	Mg 279.077 IEC†	-0.4	-1.8	-67.771	ug/L	-67.771	ppb	20:30:46
2	Na 589.592 Radial†	-709.6	-87.7	-26.696	ug/L	-26.696	ppb	20:30:26
2	Sr 421.552†	80.5	9.8	0.0606	ug/L	0.0606	ppb	20:30:26
2	Sc 361.383	994164.2	994164.2	100.22	%			20:31:48
2	Y 371.029	862425.0	862425.0	100.29	%			20:31:48
2	Ag 328.068†	459.2	83.7	0.3526	ug/L	0.3526	ppb	20:31:53
2	As 188.979†	-32.9	3.7	1.5067	ug/L	1.5067	ppb	20:32:13
2	B 249.677†	-82.8	258.4	5.9373	ug/L	5.9373	ppb	20:32:13
2	Ba 233.527†	-5.4	11.0	0.0883	ug/L	0.0883	ppb	20:32:13
2	Be 313.107†	-4703.6	109.1	0.0398	ug/L	0.0398	ppb	20:31:53
2	Cd 226.502†	-189.5	-5.5	-0.0610	ug/L	-0.0610	ppb	20:32:13
2	Co 228.616†	-79.8	-10.6	-0.2232	ug/L	-0.2232	ppb	20:32:13
2	Cr 267.716†	68.9	-0.5	-0.0045	ug/L	-0.0045	ppb	20:32:13
2	Cu 324.752†	8900.2	-89.4	-0.2508	ug/L	-0.2508	ppb	20:31:53
2	Mn 257.610†	581.7	10.2	0.0125	ug/L	0.0125	ppb	20:32:13
2	Mo 202.031†	14.7	4.1	0.2779	ug/L	0.2779	ppb	20:32:13
2	Ni 231.604†	96.2	15.5	0.3750	ug/L	0.3750	ppb	20:32:13

2	P 214.914†	239.4	-9.8	-5.3070	ug/L	-5.3070 ppb	20:32:13
2	Pb 220.353†	-49.0	-3.8	-0.4516	ug/L	-0.4516 ppb	20:32:13
2	S 181.975 Axial†	38.8	-4.1	-5.4552	ug/L	-5.4552 ppb	20:32:13
2	Sb 206.836†	40.2	5.3	1.7440	ug/L	1.7440 ppb	20:32:13
2	Se 196.026†	-19.3	4.4	2.3654	ug/L	2.3654 ppb	20:32:13
2	Si 251.611†	503.2	98.4	3.0027	ug/L	3.0027 ppb	20:32:13
2	Sn 189.927†	15.3	14.1	2.5644	ug/L	2.5644 ppb	20:32:13
2	Ti 334.940†	-1015.0	1.8	0.0105	ug/L	0.0105 ppb	20:31:53
2	Tl 190.801†	-41.0	4.1	1.3438	ug/L	1.3438 ppb	20:32:13
2	U 409.014†	-2974.2	-173.9	-4.4382	ug/L	-4.4382 ppb	20:31:53
2	V 292.402†	-1485.0	-15.6	-0.1046	ug/L	-0.1046 ppb	20:31:53
2	Zn 213.857†	1014.8	91.8	0.8375	ug/L	0.8375 ppb	20:32:13
2	SiO2†	510.6	111.7	7.2803	ug/L	7.2803 ppb	20:33:24
3	Sc Radial	5638.3	5638.3	107	%		20:30:52
3	Y RADIAL	5922.6	5922.6	107.2	%		20:30:52
3	Al 396.153Radial†	-106.8	7.0	5.6268	ug/L	5.6268 ppb	20:31:12
3	Ca 317.933Radial†	25.2	2.8	4.7436	ug/L	4.7436 ppb	20:31:12
3	Fe 238.204 Radial†	8.8	-1.8	-17.139	ug/L	-17.139 ppb	20:31:12
3	K 766.490 Radial†	2743.6	-94.6	-17.065	ug/L	-17.065 ppb	20:30:52
3	Mg 279.077 IEC†	3.2	1.6	61.484	ug/L	61.484 ppb	20:31:12
3	Na 589.592 Radial†	-722.7	-88.5	-26.944	ug/L	-26.944 ppb	20:30:52
3	Sr 421.552†	87.4	15.0	0.0925	ug/L	0.0925 ppb	20:30:52
3	Sc 361.383	988338.1	988338.1	99.632	%		20:32:19
3	Y 371.029	856900.7	856900.7	99.644	%		20:32:19
3	Ag 328.068†	335.0	-38.3	-0.1652	ug/L	-0.1652 ppb	20:32:24
3	As 188.979†	-27.7	8.7	3.5792	ug/L	3.5792 ppb	20:32:44
3	B 249.677†	-96.6	244.1	5.6072	ug/L	5.6072 ppb	20:32:44
3	Ba 233.527†	-18.2	-1.9	-0.0164	ug/L	-0.0164 ppb	20:32:44
3	Be 313.107†	-4513.4	272.4	0.0995	ug/L	0.0995 ppb	20:32:24
3	Cd 226.502†	-174.4	8.5	0.0968	ug/L	0.0968 ppb	20:32:44
3	Co 228.616†	-69.2	-0.4	-0.0083	ug/L	-0.0083 ppb	20:32:44
3	Cr 267.716†	51.0	-18.1	-0.1906	ug/L	-0.1906 ppb	20:32:44
3	Cu 324.752†	8842.3	-95.1	-0.2672	ug/L	-0.2672 ppb	20:32:24
3	Mn 257.610†	587.3	19.3	0.0175	ug/L	0.0175 ppb	20:32:44
3	Mo 202.031†	7.5	-3.0	-0.2102	ug/L	-0.2102 ppb	20:32:44
3	Ni 231.604†	104.3	24.2	0.5853	ug/L	0.5853 ppb	20:32:44
3	P 214.914†	253.6	5.8	3.3012	ug/L	3.3012 ppb	20:32:44
3	Pb 220.353†	-40.2	4.8	0.5821	ug/L	0.5821 ppb	20:32:44
3	S 181.975 Axial†	43.5	1.0	1.2880	ug/L	1.2880 ppb	20:32:44
3	Sb 206.836†	38.9	4.2	1.3529	ug/L	1.3529 ppb	20:32:44
3	Se 196.026†	-12.8	10.9	5.9039	ug/L	5.9039 ppb	20:32:44
3	Si 251.611†	497.8	96.0	2.9339	ug/L	2.9339 ppb	20:32:44
3	Sn 189.927†	2.2	1.1	0.1974	ug/L	0.1974 ppb	20:32:44
3	Ti 334.940†	-965.8	45.3	0.0662	ug/L	0.0662 ppb	20:32:24
3	Tl 190.801†	-39.0	5.9	1.8958	ug/L	1.8958 ppb	20:32:44
3	U 409.014†	-2943.9	-161.0	-4.1068	ug/L	-4.1068 ppb	20:32:24
3	V 292.402†	-1477.6	-16.9	-0.1168	ug/L	-0.1168 ppb	20:32:24
3	Zn 213.857†	1007.3	90.2	0.8219	ug/L	0.8219 ppb	20:32:44
3	SiO2†	503.0	107.1	6.9920	ug/L	6.9920 ppb	20:33:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	991090.3	99.910	%	0.2950				0.30%
Sc Radial	5596.1	106	%	0.9				0.87%
Y 371.029	859955.2	100.000	%	0.3265				0.33%
Y RADIAL	5870.9	106.3	%	1.07				1.01%
Ag 328.068†	25.6	0.1078	ug/L	0.26003	0.1078	ppb	0.26003	241.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.9	-0.7425	ug/L	6.59405	-0.7425	ppb	6.59405	888.12%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.6	1.9002	ug/L	1.52087	1.9002	ppb	1.52087	80.04%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	256.5	5.8928	ug/L	0.26612	5.8928	ppb	0.26612	4.52%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.6	0.0611	ug/L	0.06811	0.0611	ppb	0.06811	111.42%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	192.9	0.0705	ug/L	0.02989	0.0705	ppb	0.02989	42.39%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.5	4.0945	ug/L	2.04526	4.0945	ppb	2.04526	49.95%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 5.3      0.0598 ug/L       0.10723      0.0598 ppb        0.10723 179.18%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                -5.2     -0.1105 ug/L       0.10780     -0.1105 ppb        0.10780  97.56%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -5.0     -0.0509 ug/L       0.12327     -0.0509 ppb        0.12327 242.13%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -106.7     -0.2993 ug/L       0.07024     -0.2993 ppb        0.07024  23.47%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.5     -14.463 ug/L        4.9533     -14.463 ppb         4.9533  34.25%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -95.8     -17.284 ug/L        3.0684     -17.284 ppb         3.0684  17.75%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.0      0.6219 ug/L      64.95566      0.6219 ppb        64.95566 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                13.4      0.0136 ug/L       0.00352      0.0136 ppb        0.00352  25.94%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 0.8      0.0513 ug/L       0.24593      0.0513 ppb        0.24593 479.65%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -79.3     -24.159 ug/L        4.6104     -24.159 ppb         4.6104  19.08%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                20.1      0.4867 ug/L       0.10577      0.4867 ppb        0.10577  21.73%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -4.9     -2.6446 ug/L       5.15854     -2.6446 ppb        5.15854 195.06%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 2.6      0.3090 ug/L       0.66736      0.3090 ppb        0.66736 215.98%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.0     -2.6558 ug/L       3.51426     -2.6558 ppb        3.51426 132.32%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.0      1.9659 ug/L       0.74906      1.9659 ppb        0.74906  38.10%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 7.5      4.0352 ug/L       1.77763      4.0352 ppb        1.77763  44.05%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                96.2      2.9369 ug/L       0.06443      2.9369 ppb        0.06443   2.19%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 9.6      1.7378 ug/L       1.33515      1.7378 ppb        1.33515  76.83%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 4.9      0.0301 ug/L       0.08193      0.0301 ppb        0.08193 271.87%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                32.6      0.0522 ug/L       0.03667      0.0522 ppb        0.03667  70.32%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 4.5      1.4595 ug/L       0.39144      1.4595 ppb        0.39144  26.82%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -200.7     -5.1212 ug/L       1.47932     -5.1212 ppb        1.47932  28.89%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -13.5     -0.0950 ug/L       0.02792     -0.0950 ppb        0.02792  29.40%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                95.5      0.8707 ug/L       0.07146      0.8707 ppb        0.07146   8.21%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     110.4      7.2010 ug/L       0.18281      7.2010 ppb        0.18281   2.54%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 29
Sample ID: 1202011876|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 1/29/2010 20:43:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011876|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5811.9	5811.9	110	%			20:44:54
1	Y RADIAL	7103.7	7103.7	128.6	%			20:44:54
1	Al 396.153Radial†	36590.6	33315.3	26912	ug/L	26912	ppb	20:44:54
1	Ca 317.933Radial†	5296.7	4786.4	7967.7	ug/L	7967.7	ppb	20:44:54
1	Fe 238.204 Radial†	9293.3	8424.3	80779	ug/L	80779	ppb	20:44:54
1	K 766.490 Radial†	30141.1	24693.8	4455.2	ug/L	4455.2	ppb	20:44:54
1	Mg 279.077 IEC†	160.0	143.8	5406.7	ug/L	5406.7	ppb	20:45:14
1	Na 589.592 Radial†	2263.8	2642.2	804.66	ug/L	804.66	ppb	20:44:54
1	Sr 421.552†	11161.8	10063.3	61.924	ug/L	61.924	ppb	20:44:54
1	Sc 361.383	1004645.5	1004645.5	101.28	%			20:46:11
1	Y 371.029	1002717.7	1002717.7	116.60	%			20:46:11
1	Ag 328.068†	-5107.4	-5417.6	3.6670	ug/L	3.6670	ppb	20:46:17
1	As 188.979†	-59.4	-22.1	29.044	ug/L	29.044	ppb	20:46:37
1	B 249.677†	645.3	978.3	9.2829	ug/L	9.2829	ppb	20:46:17
1	Ba 233.527†	44501.5	43957.1	359.21	ug/L	359.21	ppb	20:46:17
1	Be 313.107†	-10442.7	-5508.7	3.0286	ug/L	3.0286	ppb	20:46:17
1	Cd 226.502†	659.1	834.3	1.0062	ug/L	1.0062	ppb	20:46:37
1	Co 228.616†	948.5	1005.6	15.609	ug/L	15.609	ppb	20:46:37
1	Cr 267.716†	2912.1	2806.1	31.495	ug/L	31.495	ppb	20:46:37
1	Cu 324.752†	21098.4	11862.4	37.874	ug/L	37.874	ppb	20:46:17
1	Mn 257.610†	2040666.7	2014381.6	2271.6	ug/L	2271.6	ppb	20:46:11
1	Mo 202.031†	83.2	71.6	11.281	ug/L	11.281	ppb	20:46:37
1	Ni 231.604†	1309.2	1212.2	29.329	ug/L	29.329	ppb	20:46:37
1	P 214.914†	1646.8	1377.4	696.23	ug/L	696.23	ppb	20:46:37
1	Pb 220.353†	681.1	717.6	84.453	ug/L	84.453	ppb	20:46:37
1	S 181.975 Axial†	229.4	183.8	241.73	ug/L	241.73	ppb	20:46:37
1	Sb 206.836†	50.3	14.8	-0.9362	ug/L	-0.9362	ppb	20:46:37
1	Se 196.026†	-406.3	-377.5	62.049	ug/L	62.049	ppb	20:46:37
1	Si 251.611†	933760.3	921590.1	28152	ug/L	28152	ppb	20:46:11
1	Sn 189.927†	-36.0	-36.6	-4.0760	ug/L	-4.0760	ppb	20:46:37
1	Ti 334.940†	1480885.3	1463238.9	2220.1	ug/L	2220.1	ppb	20:46:11
1	Tl 190.801†	-144.7	-97.8	-2.7150	ug/L	-2.7150	ppb	20:46:37
1	U 409.014†	-10503.3	-7577.2	-202.71	ug/L	-202.71	ppb	20:46:11
1	V 292.402†	15780.3	17047.7	96.603	ug/L	96.603	ppb	20:46:17
1	Zn 213.857†	41410.9	39968.3	356.77	ug/L	356.77	ppb	20:46:17
1	SiO2†	923740.3	911702.3	59461	ug/L	59461	ppb	20:47:45
2	Sc Radial	5687.9	5687.9	108	%			20:45:19
2	Y RADIAL	6938.1	6938.1	125.6	%			20:45:19
2	Al 396.153Radial†	35761.8	33270.2	26876	ug/L	26876	ppb	20:45:19
2	Ca 317.933Radial†	5200.9	4802.3	7994.1	ug/L	7994.1	ppb	20:45:19
2	Fe 238.204 Radial†	9137.6	8463.6	81156	ug/L	81156	ppb	20:45:19
2	K 766.490 Radial†	29593.1	24781.7	4471.1	ug/L	4471.1	ppb	20:45:19
2	Mg 279.077 IEC†	160.8	147.7	5555.4	ug/L	5555.4	ppb	20:45:39
2	Na 589.592 Radial†	2234.5	2659.8	810.02	ug/L	810.02	ppb	20:45:19
2	Sr 421.552†	10874.8	10017.9	61.644	ug/L	61.644	ppb	20:45:19
2	Sc 361.383	998465.7	998465.7	100.65	%			20:46:42
2	Y 371.029	997513.0	997513.0	116.00	%			20:46:42
2	Ag 328.068†	-5264.3	-5604.7	3.0048	ug/L	3.0048	ppb	20:46:48
2	As 188.979†	-51.2	-14.4	32.497	ug/L	32.497	ppb	20:47:08
2	B 249.677†	691.9	1028.5	10.375	ug/L	10.375	ppb	20:46:48
2	Ba 233.527†	44975.3	44699.8	365.25	ug/L	365.25	ppb	20:46:48
2	Be 313.107†	-10537.6	-5666.7	3.0191	ug/L	3.0191	ppb	20:46:48
2	Cd 226.502†	644.3	823.7	0.8482	ug/L	0.8482	ppb	20:47:08
2	Co 228.616†	945.5	1008.4	15.621	ug/L	15.621	ppb	20:47:08
2	Cr 267.716†	2923.1	2834.8	31.809	ug/L	31.809	ppb	20:47:08
2	Cu 324.752†	21443.5	12334.2	39.226	ug/L	39.226	ppb	20:46:48
2	Mn 257.610†	2050265.7	2036389.5	2296.4	ug/L	2296.4	ppb	20:46:42
2	Mo 202.031†	88.2	77.0	11.685	ug/L	11.685	ppb	20:47:08
2	Ni 231.604†	1316.8	1227.8	29.705	ug/L	29.705	ppb	20:47:08

2	P 214.914†	1633.1	1373.8	693.70	ug/L	693.70 ppb	20:47:08
2	Pb 220.353†	678.3	719.0	84.579	ug/L	84.579 ppb	20:47:08
2	S 181.975 Axial†	237.5	193.2	254.44	ug/L	254.44 ppb	20:47:08
2	Sb 206.836†	67.3	32.0	4.5491	ug/L	4.5491 ppb	20:47:08
2	Se 196.026†	-407.6	-381.2	61.260	ug/L	61.260 ppb	20:47:08
2	Si 251.611†	937684.2	931195.0	28445	ug/L	28445 ppb	20:46:42
2	Sn 189.927†	-29.9	-30.8	-3.0025	ug/L	-3.0025 ppb	20:47:08
2	Ti 334.940†	1485838.3	1477209.9	2241.3	ug/L	2241.3 ppb	20:46:42
2	Tl 190.801†	-144.3	-98.4	-2.6042	ug/L	-2.6042 ppb	20:47:08
2	U 409.014†	-10474.7	-7612.9	-203.67	ug/L	-203.67 ppb	20:46:42
2	V 292.402†	16030.1	17392.3	98.775	ug/L	98.775 ppb	20:46:48
2	Zn 213.857†	41881.3	40688.7	363.31	ug/L	363.31 ppb	20:46:48
2	SiO2†	926117.2	919709.0	59984	ug/L	59984 ppb	20:47:51
3	Sc Radial	5633.7	5633.7	107	%		20:45:44
3	Y RADIAL	6843.0	6843.0	123.9	%		20:45:44
3	Al 396.153Radial†	35508.0	33351.8	26942	ug/L	26942 ppb	20:45:44
3	Ca 317.933Radial†	5145.4	4796.8	7984.9	ug/L	7984.9 ppb	20:45:44
3	Fe 238.204 Radial†	9070.0	8481.9	81331	ug/L	81331 ppb	20:45:44
3	K 766.490 Radial†	29378.7	24845.1	4482.5	ug/L	4482.5 ppb	20:45:44
3	Mg 279.077 IEC†	159.4	147.8	5559.4	ug/L	5559.4 ppb	20:46:04
3	Na 589.592 Radial†	2265.4	2708.6	824.91	ug/L	824.91 ppb	20:45:44
3	Sr 421.552†	10849.8	10091.6	62.097	ug/L	62.097 ppb	20:45:44
3	Sc 361.383	1002713.6	1002713.6	101.08	%		20:47:14
3	Y 371.029	1000362.5	1000362.5	116.33	%		20:47:14
3	Ag 328.068†	-5232.7	-5551.3	3.2869	ug/L	3.2869 ppb	20:47:19
3	As 188.979†	-62.1	-24.9	28.092	ug/L	28.092 ppb	20:47:39
3	B 249.677†	691.8	1025.5	10.277	ug/L	10.277 ppb	20:47:19
3	Ba 233.527†	44913.1	44449.0	363.22	ug/L	363.22 ppb	20:47:19
3	Be 313.107†	-10415.7	-5501.8	3.0495	ug/L	3.0495 ppb	20:47:19
3	Cd 226.502†	648.6	825.2	0.8464	ug/L	0.8464 ppb	20:47:39
3	Co 228.616†	953.7	1012.5	15.731	ug/L	15.731 ppb	20:47:39
3	Cr 267.716†	2919.3	2818.8	31.643	ug/L	31.643 ppb	20:47:39
3	Cu 324.752†	21505.2	12305.0	39.154	ug/L	39.154 ppb	20:47:19
3	Mn 257.610†	2047891.9	2025411.7	2284.1	ug/L	2284.1 ppb	20:47:14
3	Mo 202.031†	84.7	73.2	11.438	ug/L	11.438 ppb	20:47:39
3	Ni 231.604†	1343.4	1248.6	30.209	ug/L	30.209 ppb	20:47:39
3	P 214.914†	1634.9	1368.7	690.77	ug/L	690.77 ppb	20:47:39
3	Pb 220.353†	662.7	700.7	82.376	ug/L	82.376 ppb	20:47:39
3	S 181.975 Axial†	226.5	181.4	238.51	ug/L	238.51 ppb	20:47:39
3	Sb 206.836†	50.3	14.9	-0.9360	ug/L	-0.9360 ppb	20:47:39
3	Se 196.026†	-404.8	-376.7	64.288	ug/L	64.288 ppb	20:47:39
3	Si 251.611†	935296.4	924886.2	28253	ug/L	28253 ppb	20:47:14
3	Sn 189.927†	-42.0	-42.7	-5.1588	ug/L	-5.1588 ppb	20:47:39
3	Ti 334.940†	1483408.9	1468552.8	2228.1	ug/L	2228.1 ppb	20:47:14
3	Tl 190.801†	-155.5	-108.8	-6.1438	ug/L	-6.1438 ppb	20:47:39
3	U 409.014†	-10598.2	-7691.0	-205.68	ug/L	-205.68 ppb	20:47:14
3	V 292.402†	15982.8	17278.1	98.012	ug/L	98.012 ppb	20:47:19
3	Zn 213.857†	41788.3	40420.4	360.84	ug/L	360.84 ppb	20:47:19
3	SiO2†	933931.2	923541.5	60234	ug/L	60234 ppb	20:47:57

Mean Data: 1202011876|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1001941.6	101.00	%	0.319				0.32%
Sc Radial	5711.2	108	%	1.7				1.60%
Y 371.029	1000197.7	116.31	%	0.303				0.26%
Y RADIAL	6961.6	126.0	%	2.39				1.90%
Ag 328.068†	-5524.5	3.3196	ug/L	0.33232	3.3196	ppb	0.33232	10.01%
Al 396.153Radial†	33312.4	26910	ug/L	33.1	26910	ppb	33.1	0.12%
As 188.979†	-20.5	29.878	ug/L	2.3181	29.878	ppb	2.3181	7.76%
B 249.677†	1010.8	9.9783	ug/L	0.60416	9.9783	ppb	0.60416	6.05%
Ba 233.527†	44368.6	362.56	ug/L	3.074	362.56	ppb	3.074	0.85%
Be 313.107†	-5559.1	3.0324	ug/L	0.01553	3.0324	ppb	0.01553	0.51%
Ca 317.933Radial†	4795.2	7982.2	ug/L	13.40	7982.2	ppb	13.40	0.17%
Cd 226.502†	827.7	0.9003	ug/L	0.09175	0.9003	ppb	0.09175	10.19%
Co 228.616†	1008.9	15.654	ug/L	0.0676	15.654	ppb	0.0676	0.43%
Cr 267.716†	2819.9	31.649	ug/L	0.1573	31.649	ppb	0.1573	0.50%
Cu 324.752†	12167.2	38.752	ug/L	0.7610	38.752	ppb	0.7610	1.96%
Fe 238.204 Radial†	8456.6	81089	ug/L	282.4	81089	ppb	282.4	0.35%
K 766.490 Radial†	24773.5	4469.6	ug/L	13.71	4469.6	ppb	13.71	0.31%

Mg 279.077 IEC†	146.5	5507.2	ug/L	87.04	5507.2	ppb	87.04	1.58%
Mn 257.610†	2025394.3	2284.0	ug/L	12.38	2284.0	ppb	12.38	0.54%
Mo 202.031†	73.9	11.468	ug/L	0.2035	11.468	ppb	0.2035	1.77%
Na 589.592 Radial†	2670.2	813.19	ug/L	10.491	813.19	ppb	10.491	1.29%
Ni 231.604†	1229.5	29.747	ug/L	0.4416	29.747	ppb	0.4416	1.48%
P 214.914†	1373.3	693.57	ug/L	2.730	693.57	ppb	2.730	0.39%
Pb 220.353†	712.5	83.803	ug/L	1.2374	83.803	ppb	1.2374	1.48%
S 181.975 Axial†	186.1	244.89	ug/L	8.422	244.89	ppb	8.422	3.44%
Sb 206.836†	20.6	0.8923	ug/L	3.16691	0.8923	ppb	3.16691	354.91%
Se 196.026†	-378.5	62.532	ug/L	1.5704	62.532	ppb	1.5704	2.51%
Si 251.611†	925890.4	28283	ug/L	149.1	28283	ppb	149.1	0.53%
Sn 189.927†	-36.7	-4.0791	ug/L	1.07816	-4.0791	ppb	1.07816	26.43%
Sr 421.552†	10057.6	61.888	ug/L	0.2289	61.888	ppb	0.2289	0.37%
Ti 334.940†	1469667.2	2229.8	ug/L	10.69	2229.8	ppb	10.69	0.48%
Tl 190.801†	-101.6	-3.8210	ug/L	2.01235	-3.8210	ppb	2.01235	52.67%
U 409.014†	-7627.0	-204.02	ug/L	1.515	-204.02	ppb	1.515	0.74%
V 292.402†	17239.3	97.797	ug/L	1.1017	97.797	ppb	1.1017	1.13%
Zn 213.857†	40359.1	360.31	ug/L	3.300	360.31	ppb	3.300	0.92%
SiO2†	918317.6	59893	ug/L	394.0	59893	ppb	394.0	0.66%

Sequence No.: 30
Sample ID: 1202011877|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 1/29/2010 20:50:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011877|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5591.2	5591.2	106	%			20:52:21
1	Y RADIAL	7014.7	7014.7	127.0	%			20:52:21
1	Al 396.153Radial†	75920.5	71729.4	57920	ug/L	57920	ppb	20:52:01
1	Ca 317.933Radial†	9221.5	8678.8	14447	ug/L	14447	ppb	20:52:01
1	Fe 238.204 Radial†	10011.3	9434.5	90480	ug/L	90480	ppb	20:52:01
1	K 766.490 Radial†	72491.6	65726.6	11860	ug/L	11860	ppb	20:52:01
1	Mg 279.077 IEC†	392.7	369.1	14004	ug/L	14004	ppb	20:52:21
1	Na 589.592 Radial†	21168.7	20557.9	6260.8	ug/L	6260.8	ppb	20:52:01
1	Sr 421.552†	101867.9	96034.3	591.40	ug/L	591.40	ppb	20:52:01
1	Sc 361.383	1005517.3	1005517.3	101.36	%			20:53:21
1	Y 371.029	1040615.8	1040615.8	121.01	%			20:53:21
1	Ag 328.068†	115246.5	113321.0	512.23	ug/L	512.23	ppb	20:53:21
1	As 188.979†	1170.4	1191.2	535.37	ug/L	535.37	ppb	20:53:41
1	B 249.677†	23127.0	23156.8	515.55	ug/L	515.55	ppb	20:53:21
1	Ba 233.527†	122001.0	120375.6	980.38	ug/L	980.38	ppb	20:53:21
1	Be 313.107†	1433852.1	1419358.7	524.60	ug/L	524.60	ppb	20:53:21
1	Cd 226.502†	45197.4	44772.8	493.82	ug/L	493.82	ppb	20:53:21
1	Co 228.616†	24126.2	23870.6	498.36	ug/L	498.36	ppb	20:53:41
1	Cr 267.716†	51176.4	50418.4	535.98	ug/L	535.98	ppb	20:53:21
1	Cu 324.752†	216100.4	204222.1	581.22	ug/L	581.22	ppb	20:53:21
1	Mn 257.610†	2726681.4	2689417.3	3030.9	ug/L	3030.9	ppb	20:53:21
1	Mo 202.031†	7086.5	6980.5	486.57	ug/L	486.57	ppb	20:53:41
1	Ni 231.604†	21815.8	21441.7	518.68	ug/L	518.68	ppb	20:53:41
1	P 214.914†	2981.8	2692.9	1320.1	ug/L	1320.1	ppb	20:53:41
1	Pb 220.353†	4811.1	4791.5	580.94	ug/L	580.94	ppb	20:53:41
1	S 181.975 Axial†	4114.9	4016.8	5383.7	ug/L	5383.7	ppb	20:53:41
1	Sb 206.836†	1517.7	1462.5	480.08	ug/L	480.08	ppb	20:53:41
1	Se 196.026†	484.0	501.2	578.91	ug/L	578.91	ppb	20:53:41
1	Si 251.611†	1185495.3	1169138.1	35708	ug/L	35708	ppb	20:53:21
1	Sn 189.927†	2726.4	2688.6	491.41	ug/L	491.41	ppb	20:53:41
1	Ti 334.940†	1978667.5	1953054.6	2962.8	ug/L	2962.8	ppb	20:53:21
1	Tl 190.801†	1401.0	1427.2	497.53	ug/L	497.53	ppb	20:53:41
1	U 409.014†	8128.6	10813.0	264.54	ug/L	264.54	ppb	20:53:21
1	V 292.402†	92684.6	92903.5	595.56	ug/L	595.56	ppb	20:53:21
1	Zn 213.857†	100123.5	97855.3	880.39	ug/L	880.39	ppb	20:53:21
1	SiO2†	1174360.4	1158158.9	75523	ug/L	75523	ppb	20:54:42
2	Sc Radial	5552.5	5552.5	105	%			20:52:47
2	Y RADIAL	6988.9	6988.9	126.5	%			20:52:47
2	Al 396.153Radial†	76086.7	72385.6	58450	ug/L	58450	ppb	20:52:26
2	Ca 317.933Radial†	9238.8	8755.8	14575	ug/L	14575	ppb	20:52:26
2	Fe 238.204 Radial†	10039.4	9526.9	91366	ug/L	91366	ppb	20:52:26
2	K 766.490 Radial†	72901.5	66591.8	12016	ug/L	12016	ppb	20:52:26
2	Mg 279.077 IEC†	391.8	370.8	14066	ug/L	14066	ppb	20:52:47
2	Na 589.592 Radial†	21256.3	20780.1	6328.5	ug/L	6328.5	ppb	20:52:26
2	Sr 421.552†	102265.8	97080.9	597.84	ug/L	597.84	ppb	20:52:26
2	Sc 361.383	1001249.1	1001249.1	100.93	%			20:53:48
2	Y 371.029	1034686.3	1034686.3	120.32	%			20:53:48
2	Ag 328.068†	114598.4	113163.6	511.86	ug/L	511.86	ppb	20:53:48
2	As 188.979†	1166.6	1192.4	536.03	ug/L	536.03	ppb	20:54:08
2	B 249.677†	22906.9	23036.1	512.62	ug/L	512.62	ppb	20:53:48
2	Ba 233.527†	121972.3	120860.2	984.34	ug/L	984.34	ppb	20:53:48
2	Be 313.107†	1426194.7	1417802.1	524.03	ug/L	524.03	ppb	20:53:48
2	Cd 226.502†	45188.4	44953.8	495.76	ug/L	495.76	ppb	20:53:48
2	Co 228.616†	24131.4	23977.2	500.61	ug/L	500.61	ppb	20:54:08
2	Cr 267.716†	51021.7	50480.4	536.66	ug/L	536.66	ppb	20:53:48
2	Cu 324.752†	214028.9	203078.6	578.04	ug/L	578.04	ppb	20:53:48
2	Mn 257.610†	2721326.6	2695579.1	3037.9	ug/L	3037.9	ppb	20:53:48
2	Mo 202.031†	7101.9	7025.7	489.74	ug/L	489.74	ppb	20:54:08
2	Ni 231.604†	21831.8	21549.4	521.29	ug/L	521.29	ppb	20:54:08

2	P 214.914†	2982.2	2706.0	1327.4 ug/L	1327.4 ppb	20:54:08
2	Pb 220.353†	4819.6	4820.2	584.42 ug/L	584.42 ppb	20:54:08
2	S 181.975 Axial†	4115.4	4034.6	5407.5 ug/L	5407.5 ppb	20:54:08
2	Sb 206.836†	1526.6	1477.7	485.13 ug/L	485.13 ppb	20:54:08
2	Se 196.026†	502.0	521.1	592.75 ug/L	592.75 ppb	20:54:08
2	Si 251.611†	1181245.6	1169913.2	35732 ug/L	35732 ppb	20:53:48
2	Sn 189.927†	2747.0	2720.5	497.23 ug/L	497.23 ppb	20:54:08
2	Ti 334.940†	1969341.8	1952136.3	2961.4 ug/L	2961.4 ppb	20:53:48
2	Tl 190.801†	1388.9	1421.1	495.56 ug/L	495.56 ppb	20:54:08
2	U 409.014†	7682.9	10405.6	254.03 ug/L	254.03 ppb	20:53:48
2	V 292.402†	92398.6	93010.0	596.15 ug/L	596.15 ppb	20:53:48
2	Zn 213.857†	99833.0	97988.6	881.51 ug/L	881.51 ppb	20:53:48
2	SiO2†	1186050.1	1174679.2	76600 ug/L	76600 ppb	20:54:48
3	Sc Radial	5631.6	5631.6	107 %		20:53:12
3	Y RADIAL	7083.0	7083.0	128.2 %		20:53:12
3	Al 396.153Radial†	76353.2	71619.9	57831 ug/L	57831 ppb	20:52:52
3	Ca 317.933Radial†	9317.2	8705.9	14492 ug/L	14492 ppb	20:52:52
3	Fe 238.204 Radial†	10059.5	9411.7	90262 ug/L	90262 ppb	20:52:52
3	K 766.490 Radial†	72867.5	65587.0	11834 ug/L	11834 ppb	20:52:52
3	Mg 279.077 IEC†	390.6	364.5	13826 ug/L	13826 ppb	20:53:12
3	Na 589.592 Radial†	21128.9	20377.1	6205.8 ug/L	6205.8 ppb	20:52:52
3	Sr 421.552†	102193.9	95648.8	589.02 ug/L	589.02 ppb	20:52:52
3	Sc 361.383	992978.5	992978.5	100.10 %		20:54:15
3	Y 371.029	1026398.6	1026398.6	119.35 %		20:54:15
3	Ag 328.068†	113562.3	113074.2	511.10 ug/L	511.10 ppb	20:54:15
3	As 188.979†	1171.7	1207.1	541.78 ug/L	541.78 ppb	20:54:36
3	B 249.677†	22802.6	23120.9	514.73 ug/L	514.73 ppb	20:54:15
3	Ba 233.527†	120312.6	120208.7	979.02 ug/L	979.02 ppb	20:54:15
3	Be 313.107†	1409840.2	1413233.1	522.36 ug/L	522.36 ppb	20:54:15
3	Cd 226.502†	44619.0	44758.0	493.68 ug/L	493.68 ppb	20:54:15
3	Co 228.616†	24178.7	24223.6	505.86 ug/L	505.86 ppb	20:54:36
3	Cr 267.716†	50516.9	50397.1	535.75 ug/L	535.75 ppb	20:54:15
3	Cu 324.752†	212701.1	203518.3	579.22 ug/L	579.22 ppb	20:54:15
3	Mn 257.610†	2689179.2	2685920.4	3026.9 ug/L	3026.9 ppb	20:54:15
3	Mo 202.031†	7112.5	7094.8	494.40 ug/L	494.40 ppb	20:54:36
3	Ni 231.604†	21840.4	21738.1	525.85 ug/L	525.85 ppb	20:54:36
3	P 214.914†	2995.3	2743.6	1348.7 ug/L	1348.7 ppb	20:54:36
3	Pb 220.353†	4817.5	4857.8	588.93 ug/L	588.93 ppb	20:54:36
3	S 181.975 Axial†	4124.1	4077.2	5464.8 ug/L	5464.8 ppb	20:54:36
3	Sb 206.836†	1512.6	1476.3	484.83 ug/L	484.83 ppb	20:54:36
3	Se 196.026†	503.8	527.0	592.31 ug/L	592.31 ppb	20:54:36
3	Si 251.611†	1169695.4	1168122.3	35677 ug/L	35677 ppb	20:54:15
3	Sn 189.927†	2743.8	2739.9	500.73 ug/L	500.73 ppb	20:54:36
3	Ti 334.940†	1950370.6	1949435.3	2957.3 ug/L	2957.3 ppb	20:54:15
3	Tl 190.801†	1406.4	1450.0	504.82 ug/L	504.82 ppb	20:54:36
3	U 409.014†	7899.6	10685.5	261.31 ug/L	261.31 ppb	20:54:15
3	V 292.402†	91208.7	92583.8	593.62 ug/L	593.62 ppb	20:54:15
3	Zn 213.857†	98663.8	97644.3	878.44 ug/L	878.44 ppb	20:54:15
3	SiO2†	1178465.5	1176889.6	76744 ug/L	76744 ppb	20:54:54

Mean Data: 1202011877|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	999915.0	100.80	%	0.643				0.64%
Sc Radial	5591.8	106	%	0.8				0.71%
Y 371.029	1033900.2	120.23	%	0.830				0.69%
Y RADIAL	7028.9	127.3	%	0.88				0.69%
Ag 328.068†	113186.3	511.73	ug/L	0.573	511.73	ppb	0.573	0.11%
Al 396.153Radial†	71911.7	58067	ug/L	334.6	58067	ppb	334.6	0.58%
As 188.979†	1196.9	537.72	ug/L	3.524	537.72	ppb	3.524	0.66%
B 249.677†	23104.6	514.30	ug/L	1.509	514.30	ppb	1.509	0.29%
Ba 233.527†	120481.5	981.25	ug/L	2.765	981.25	ppb	2.765	0.28%
Be 313.107†	1416798.0	523.66	ug/L	1.168	523.66	ppb	1.168	0.22%
Ca 317.933Radial†	8713.5	14505	ug/L	65.0	14505	ppb	65.0	0.45%
Cd 226.502†	44828.2	494.42	ug/L	1.163	494.42	ppb	1.163	0.24%
Co 228.616†	24023.8	501.61	ug/L	3.846	501.61	ppb	3.846	0.77%
Cr 267.716†	50432.0	536.13	ug/L	0.473	536.13	ppb	0.473	0.09%
Cu 324.752†	203606.4	579.49	ug/L	1.605	579.49	ppb	1.605	0.28%
Fe 238.204 Radial†	9457.7	90703	ug/L	584.8	90703	ppb	584.8	0.64%
K 766.490 Radial†	65968.5	11903	ug/L	98.2	11903	ppb	98.2	0.83%

Mg 279.077 IEC†	368.1	13966	ug/L	124.8	13966	ppb	124.8	0.89%
Mn 257.610†	2690305.6	3031.9	ug/L	5.55	3031.9	ppb	5.55	0.18%
Mo 202.031†	7033.7	490.23	ug/L	3.939	490.23	ppb	3.939	0.80%
Na 589.592 Radial†	20571.7	6265.0	ug/L	61.47	6265.0	ppb	61.47	0.98%
Ni 231.604†	21576.4	521.94	ug/L	3.629	521.94	ppb	3.629	0.70%
P 214.914†	2714.2	1332.1	ug/L	14.89	1332.1	ppb	14.89	1.12%
Pb 220.353†	4823.2	584.77	ug/L	4.009	584.77	ppb	4.009	0.69%
S 181.975 Axial†	4042.9	5418.6	ug/L	41.70	5418.6	ppb	41.70	0.77%
Sb 206.836†	1472.1	483.34	ug/L	2.835	483.34	ppb	2.835	0.59%
Se 196.026†	516.4	587.99	ug/L	7.862	587.99	ppb	7.862	1.34%
Si 251.611†	1169057.9	35706	ug/L	27.5	35706	ppb	27.5	0.08%
Sn 189.927†	2716.3	496.45	ug/L	4.708	496.45	ppb	4.708	0.95%
Sr 421.552†	96254.7	592.75	ug/L	4.564	592.75	ppb	4.564	0.77%
Ti 334.940†	1951542.0	2960.5	ug/L	2.84	2960.5	ppb	2.84	0.10%
Tl 190.801†	1432.7	499.30	ug/L	4.878	499.30	ppb	4.878	0.98%
U 409.014†	10634.7	259.96	ug/L	5.380	259.96	ppb	5.380	2.07%
V 292.402†	92832.4	595.11	ug/L	1.325	595.11	ppb	1.325	0.22%
Zn 213.857†	97829.4	880.11	ug/L	1.552	880.11	ppb	1.552	0.18%
SiO2†	1169909.3	76289	ug/L	667.5	76289	ppb	667.5	0.87%

Sequence No.: 31
Sample ID: 1202011879|940165|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 1/29/2010 20:57:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011879|940165|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5664.9	5664.9	107	%			20:59:18
1	Y RADIAL	6917.9	6917.9	125.3	%			20:59:18
1	Al 396.153Radial†	70778.8	66009.4	53300	ug/L	53300	ppb	20:58:58
1	Ca 317.933Radial†	8485.5	7880.2	13118	ug/L	13118	ppb	20:59:18
1	Fe 238.204 Radial†	10029.7	9328.7	89465	ug/L	89465	ppb	20:58:58
1	K 766.490 Radial†	69681.6	62219.7	11227	ug/L	11227	ppb	20:58:58
1	Mg 279.077 IEC†	362.0	335.7	12728	ug/L	12728	ppb	20:59:18
1	Na 589.592 Radial†	21556.2	20658.7	6291.5	ug/L	6291.5	ppb	20:58:58
1	Sr 421.552†	100921.3	93901.6	578.27	ug/L	578.27	ppb	20:58:58
1	Sc 361.383	1015652.8	1015652.8	102.39	%			21:00:18
1	Y 371.029	1021607.4	1021607.4	118.80	%			21:00:18
1	Ag 328.068†	115821.2	112747.8	509.43	ug/L	509.43	ppb	21:00:18
1	As 188.979†	1171.0	1180.2	528.23	ug/L	528.23	ppb	21:00:38
1	B 249.677†	23055.1	22858.9	508.89	ug/L	508.89	ppb	21:00:18
1	Ba 233.527†	107817.2	105321.2	858.23	ug/L	858.23	ppb	21:00:18
1	Be 313.107†	1439670.1	1410924.9	520.90	ug/L	520.90	ppb	21:00:18
1	Cd 226.502†	45626.8	44747.1	493.64	ug/L	493.64	ppb	21:00:18
1	Co 228.616†	24088.1	23595.9	493.09	ug/L	493.09	ppb	21:00:38
1	Cr 267.716†	51629.8	50357.4	535.29	ug/L	535.29	ppb	21:00:18
1	Cu 324.752†	223964.2	209775.2	596.83	ug/L	596.83	ppb	21:00:18
1	Mn 257.610†	2465531.9	2407509.1	2714.0	ug/L	2714.0	ppb	21:00:18
1	Mo 202.031†	7114.8	6938.4	483.58	ug/L	483.58	ppb	21:00:38
1	Ni 231.604†	21736.7	21149.7	511.62	ug/L	511.62	ppb	21:00:38
1	P 214.914†	2567.7	2259.2	1077.0	ug/L	1077.0	ppb	21:00:38
1	Pb 220.353†	4738.9	4673.6	565.83	ug/L	565.83	ppb	21:00:38
1	S 181.975 Axial†	4172.6	4032.6	5405.8	ug/L	5405.8	ppb	21:00:38
1	Sb 206.836†	1531.6	1461.1	480.63	ug/L	480.63	ppb	21:00:38
1	Se 196.026†	506.9	518.8	584.88	ug/L	584.88	ppb	21:00:38
1	Si 251.611†	1138321.6	1111392.4	33944	ug/L	33944	ppb	21:00:18
1	Sn 189.927†	2784.1	2718.1	496.55	ug/L	496.55	ppb	21:00:38
1	Ti 334.940†	1812046.7	1770836.5	2686.3	ug/L	2686.3	ppb	21:00:18
1	Tl 190.801†	1422.7	1434.6	496.16	ug/L	496.16	ppb	21:00:38
1	U 409.014†	8787.0	11376.0	279.03	ug/L	279.03	ppb	21:00:18
1	V 292.402†	91951.5	91275.0	585.37	ug/L	585.37	ppb	21:00:18
1	Zn 213.857†	98265.1	95054.5	854.94	ug/L	854.94	ppb	21:00:18
1	SiO2†	1124325.9	1097728.8	71581	ug/L	71581	ppb	21:01:39
2	Sc Radial	5688.6	5688.6	108	%			20:59:44
2	Y RADIAL	6936.8	6936.8	125.6	%			20:59:44
2	Al 396.153Radial†	71803.9	66685.7	53846	ug/L	53846	ppb	20:59:24
2	Ca 317.933Radial†	8475.5	7838.0	13048	ug/L	13048	ppb	20:59:44
2	Fe 238.204 Radial†	10146.3	9397.9	90129	ug/L	90129	ppb	20:59:24
2	K 766.490 Radial†	70577.1	62780.0	11328	ug/L	11328	ppb	20:59:24
2	Mg 279.077 IEC†	353.5	326.4	12372	ug/L	12372	ppb	20:59:44
2	Na 589.592 Radial†	21921.2	20913.6	6369.2	ug/L	6369.2	ppb	20:59:24
2	Sr 421.552†	102852.2	95300.9	586.89	ug/L	586.89	ppb	20:59:24
2	Sc 361.383	1005334.7	1005334.7	101.35	%			21:00:45
2	Y 371.029	1012687.5	1012687.5	117.76	%			21:00:45
2	Ag 328.068†	115518.9	113610.5	513.32	ug/L	513.32	ppb	21:00:45
2	As 188.979†	1177.1	1198.0	535.84	ug/L	535.84	ppb	21:01:05
2	B 249.677†	23043.2	23078.3	513.80	ug/L	513.80	ppb	21:00:45
2	Ba 233.527†	107514.8	106103.6	864.61	ug/L	864.61	ppb	21:00:45
2	Be 313.107†	1434269.8	1420027.8	524.26	ug/L	524.26	ppb	21:00:45
2	Cd 226.502†	45430.6	45010.9	496.53	ug/L	496.53	ppb	21:00:45
2	Co 228.616†	24061.8	23811.4	497.60	ug/L	497.60	ppb	21:01:05
2	Cr 267.716†	51386.4	50634.8	538.24	ug/L	538.24	ppb	21:00:45
2	Cu 324.752†	223156.3	211223.1	600.96	ug/L	600.96	ppb	21:00:45
2	Mn 257.610†	2457463.8	2424263.1	2732.9	ug/L	2732.9	ppb	21:00:45
2	Mo 202.031†	7096.0	6991.2	487.26	ug/L	487.26	ppb	21:01:05
2	Ni 231.604†	21660.9	21292.9	515.08	ug/L	515.08	ppb	21:01:05

2	P 214.914†	2531.2	2249.0	1070.1 ug/L	1070.1 ppb	21:01:05
2	Pb 220.353†	4764.9	4746.8	574.69 ug/L	574.69 ppb	21:01:05
2	S 181.975 Axial†	4166.1	4068.0	5453.2 ug/L	5453.2 ppb	21:01:05
2	Sb 206.836†	1534.1	1478.9	486.44 ug/L	486.44 ppb	21:01:05
2	Se 196.026†	509.4	526.3	591.24 ug/L	591.24 ppb	21:01:05
2	Si 251.611†	1133887.9	1118428.3	34159 ug/L	34159 ppb	21:00:45
2	Sn 189.927†	2775.8	2737.8	500.12 ug/L	500.12 ppb	21:01:05
2	Ti 334.940†	1805615.2	1782654.6	2704.3 ug/L	2704.3 ppb	21:00:45
2	Tl 190.801†	1413.7	1439.9	498.11 ug/L	498.11 ppb	21:01:05
2	U 409.014†	8722.4	11400.4	279.57 ug/L	279.57 ppb	21:00:45
2	V 292.402†	91637.8	91887.2	589.28 ug/L	589.28 ppb	21:00:45
2	Zn 213.857†	98078.6	95855.5	862.16 ug/L	862.16 ppb	21:00:45
2	SiO2†	1130764.8	1115352.7	72731 ug/L	72731 ppb	21:01:45
3	Sc Radial	5661.4	5661.4	107 %		21:00:09
3	Y RADIAL	6921.2	6921.2	125.3 %		21:00:09
3	Al 396.153Radial†	70439.8	65734.5	53077 ug/L	53077 ppb	20:59:49
3	Ca 317.933Radial†	8497.8	7896.5	13145 ug/L	13145 ppb	21:00:09
3	Fe 238.204 Radial†	9936.2	9247.4	88686 ug/L	88686 ppb	20:59:49
3	K 766.490 Radial†	69307.8	61911.8	11171 ug/L	11171 ppb	20:59:49
3	Mg 279.077 IEC†	355.9	330.3	12522 ug/L	12522 ppb	21:00:09
3	Na 589.592 Radial†	21280.2	20414.1	6217.0 ug/L	6217.0 ppb	20:59:49
3	Sr 421.552†	100311.3	93391.7	575.13 ug/L	575.13 ppb	20:59:49
3	Sc 361.383	1001007.0	1001007.0	100.91 %		21:01:13
3	Y 371.029	1009576.8	1009576.8	117.40 %		21:01:13
3	Ag 328.068†	114634.3	113226.7	511.22 ug/L	511.22 ppb	21:01:13
3	As 188.979†	1162.7	1188.8	531.64 ug/L	531.64 ppb	21:01:33
3	B 249.677†	22787.6	22923.3	510.48 ug/L	510.48 ppb	21:01:13
3	Ba 233.527†	106810.9	105864.7	862.62 ug/L	862.62 ppb	21:01:13
3	Be 313.107†	1427275.7	1419215.1	523.95 ug/L	523.95 ppb	21:01:13
3	Cd 226.502†	45064.3	44841.8	494.78 ug/L	494.78 ppb	21:01:13
3	Co 228.616†	23989.3	23842.1	498.29 ug/L	498.29 ppb	21:01:33
3	Cr 267.716†	51252.4	50721.2	539.13 ug/L	539.13 ppb	21:01:13
3	Cu 324.752†	221341.2	210376.3	598.49 ug/L	598.49 ppb	21:01:13
3	Mn 257.610†	2439963.1	2417403.4	2725.1 ug/L	2725.1 ppb	21:01:13
3	Mo 202.031†	7090.5	7016.0	488.85 ug/L	488.85 ppb	21:01:33
3	Ni 231.604†	21661.6	21385.9	517.33 ug/L	517.33 ppb	21:01:33
3	P 214.914†	2536.1	2264.5	1080.2 ug/L	1080.2 ppb	21:01:33
3	Pb 220.353†	4722.8	4725.4	572.10 ug/L	572.10 ppb	21:01:33
3	S 181.975 Axial†	4154.2	4074.0	5461.4 ug/L	5461.4 ppb	21:01:33
3	Sb 206.836†	1528.9	1480.2	486.94 ug/L	486.94 ppb	21:01:33
3	Se 196.026†	501.2	520.5	583.20 ug/L	583.20 ppb	21:01:33
3	Si 251.611†	1125820.3	1115270.4	34063 ug/L	34063 ppb	21:01:13
3	Sn 189.927†	2772.1	2746.0	501.60 ug/L	501.60 ppb	21:01:33
3	Ti 334.940†	1793102.4	1777957.2	2697.1 ug/L	2697.1 ppb	21:01:13
3	Tl 190.801†	1408.1	1440.5	498.19 ug/L	498.19 ppb	21:01:33
3	U 409.014†	8763.4	11478.2	281.72 ug/L	281.72 ppb	21:01:13
3	V 292.402†	91097.5	91742.7	588.59 ug/L	588.59 ppb	21:01:13
3	Zn 213.857†	97272.3	95474.9	858.82 ug/L	858.82 ppb	21:01:13
3	SiO2†	1135099.5	1124472.0	73325 ug/L	73325 ppb	21:01:51

Mean Data: 1202011879|940165|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1007331.5	101.55	%	0.759				0.75%
Sc Radial	5671.6	108	%	0.3				0.26%
Y 371.029	1014623.9	117.99	%	0.726				0.62%
Y RADIAL	6925.3	125.4	%	0.18				0.15%
Ag 328.068†	113195.0	511.33	ug/L	1.948	511.33	ppb	1.948	0.38%
Al 396.153Radial†	66143.2	53408	ug/L	395.4	53408	ppb	395.4	0.74%
As 188.979†	1189.0	531.90	ug/L	3.811	531.90	ppb	3.811	0.72%
B 249.677†	22953.5	511.06	ug/L	2.509	511.06	ppb	2.509	0.49%
Ba 233.527†	105763.1	861.82	ug/L	3.262	861.82	ppb	3.262	0.38%
Be 313.107†	1416722.6	523.04	ug/L	1.857	523.04	ppb	1.857	0.36%
Ca 317.933Radial†	7871.6	13103	ug/L	50.3	13103	ppb	50.3	0.38%
Cd 226.502†	44866.6	494.98	ug/L	1.458	494.98	ppb	1.458	0.29%
Co 228.616†	23749.8	496.33	ug/L	2.828	496.33	ppb	2.828	0.57%
Cr 267.716†	50571.1	537.56	ug/L	2.010	537.56	ppb	2.010	0.37%
Cu 324.752†	210458.2	598.76	ug/L	2.075	598.76	ppb	2.075	0.35%
Fe 238.204 Radial†	9324.6	89427	ug/L	722.3	89427	ppb	722.3	0.81%
K 766.490 Radial†	62303.8	11242	ug/L	79.5	11242	ppb	79.5	0.71%

Mg 279.077 IEC†	330.8	12540	ug/L	178.6	12540	ppb	178.6	1.42%
Mn 257.610†	2416391.9	2724.0	ug/L	9.50	2724.0	ppb	9.50	0.35%
Mo 202.031†	6981.9	486.56	ug/L	2.701	486.56	ppb	2.701	0.56%
Na 589.592 Radial†	20662.1	6292.6	ug/L	76.08	6292.6	ppb	76.08	1.21%
Ni 231.604†	21276.2	514.68	ug/L	2.878	514.68	ppb	2.878	0.56%
P 214.914†	2257.6	1075.7	ug/L	5.15	1075.7	ppb	5.15	0.48%
Pb 220.353†	4715.3	570.87	ug/L	4.552	570.87	ppb	4.552	0.80%
S 181.975 Axial†	4058.2	5440.1	ug/L	30.05	5440.1	ppb	30.05	0.55%
Sb 206.836†	1473.4	484.67	ug/L	3.504	484.67	ppb	3.504	0.72%
Se 196.026†	521.9	586.44	ug/L	4.241	586.44	ppb	4.241	0.72%
Si 251.611†	1115030.4	34055	ug/L	107.6	34055	ppb	107.6	0.32%
Sn 189.927†	2734.0	499.42	ug/L	2.598	499.42	ppb	2.598	0.52%
Sr 421.552†	94198.1	580.10	ug/L	6.089	580.10	ppb	6.089	1.05%
Ti 334.940†	1777149.4	2695.9	ug/L	9.03	2695.9	ppb	9.03	0.34%
Tl 190.801†	1438.3	497.49	ug/L	1.151	497.49	ppb	1.151	0.23%
U 409.014†	11418.2	280.10	ug/L	1.422	280.10	ppb	1.422	0.51%
V 292.402†	91635.0	587.75	ug/L	2.088	587.75	ppb	2.088	0.36%
Zn 213.857†	95461.7	858.64	ug/L	3.613	858.64	ppb	3.613	0.42%
SiO2†	1112517.8	72546	ug/L	886.6	72546	ppb	886.6	1.22%

Sequence No.: 32
Sample ID: 1202011878|940165|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 1/29/2010 21:04:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202011878|940165|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5626.3	5626.3	107	%			21:05:56
1	Y RADIAL	6089.5	6089.5	110.3	%			21:05:56
1	Al 396.153Radial†	7019.0	6687.2	5401.9	ug/L	5401.9	ppb	21:05:56
1	Ca 317.933Radial†	1024.0	939.3	1563.6	ug/L	1563.6	ppb	21:06:16
1	Fe 238.204 Radial†	2007.9	1872.3	17953	ug/L	17953	ppb	21:06:16
1	K 766.490 Radial†	8301.8	5121.7	924.02	ug/L	924.02	ppb	21:05:56
1	Mg 279.077 IEC†	33.2	29.8	1119.0	ug/L	1119.0	ppb	21:06:16
1	Na 589.592 Radial†	18.8	605.2	184.32	ug/L	184.32	ppb	21:05:56
1	Sr 421.552†	2227.8	2021.8	12.441	ug/L	12.441	ppb	21:05:56
1	Sc 361.383	1006756.3	1006756.3	101.49	%			21:07:13
1	Y 371.029	898606.9	898606.9	104.49	%			21:07:13
1	Ag 328.068†	-897.9	-1259.2	0.5766	ug/L	0.5766	ppb	21:07:18
1	As 188.979†	-37.4	-0.3	8.1363	ug/L	8.1363	ppb	21:07:38
1	B 249.677†	91.9	431.6	6.9809	ug/L	6.9809	ppb	21:07:18
1	Ba 233.527†	9258.6	9139.2	74.721	ug/L	74.721	ppb	21:07:18
1	Be 313.107†	-6067.9	-1176.4	0.6366	ug/L	0.6366	ppb	21:07:18
1	Cd 226.502†	-3.7	179.9	0.1618	ug/L	0.1618	ppb	21:07:38
1	Co 228.616†	153.8	220.6	3.4559	ug/L	3.4559	ppb	21:07:38
1	Cr 267.716†	713.0	633.2	7.0982	ug/L	7.0982	ppb	21:07:38
1	Cu 324.752†	11466.7	2328.3	7.5455	ug/L	7.5455	ppb	21:07:18
1	Mn 257.610†	534934.4	526516.0	593.46	ug/L	593.46	ppb	21:07:13
1	Mo 202.031†	37.3	26.2	3.2081	ug/L	3.2081	ppb	21:07:38
1	Ni 231.604†	347.6	262.1	6.3410	ug/L	6.3410	ppb	21:07:38
1	P 214.914†	541.9	285.3	143.28	ug/L	143.28	ppb	21:07:38
1	Pb 220.353†	166.4	209.1	24.604	ug/L	24.604	ppb	21:07:38
1	S 181.975 Axial†	89.1	45.1	59.530	ug/L	59.530	ppb	21:07:38
1	Sb 206.836†	38.1	2.7	-0.2869	ug/L	-0.2869	ppb	21:07:38
1	Se 196.026†	-99.3	-74.1	19.116	ug/L	19.116	ppb	21:07:38
1	Si 251.611†	201668.3	198305.9	6057.7	ug/L	6057.7	ppb	21:07:13
1	Sn 189.927†	0.2	-0.9	0.3816	ug/L	0.3816	ppb	21:07:38
1	Ti 334.940†	313095.1	309516.2	469.59	ug/L	469.59	ppb	21:07:13
1	Tl 190.801†	-68.0	-22.0	-0.4498	ug/L	-0.4498	ppb	21:07:38
1	U 409.014†	-4393.2	-1534.9	-41.247	ug/L	-41.247	ppb	21:07:13
1	V 292.402†	2200.8	3634.7	20.508	ug/L	20.508	ppb	21:07:18
1	Zn 213.857†	9493.0	8432.9	75.187	ug/L	75.187	ppb	21:07:18
1	SiO2†	200771.4	197428.1	12876	ug/L	12876	ppb	21:08:45
2	Sc Radial	5610.2	5610.2	106	%			21:06:21
2	Y RADIAL	6088.2	6088.2	110.2	%			21:06:21
2	Al 396.153Radial†	7023.9	6710.7	5420.9	ug/L	5420.9	ppb	21:06:21
2	Ca 317.933Radial†	1013.1	931.9	1551.2	ug/L	1551.2	ppb	21:06:41
2	Fe 238.204 Radial†	1986.1	1857.3	17809	ug/L	17809	ppb	21:06:41
2	K 766.490 Radial†	8231.4	5077.9	916.13	ug/L	916.13	ppb	21:06:21
2	Mg 279.077 IEC†	32.9	29.6	1112.0	ug/L	1112.0	ppb	21:06:41
2	Na 589.592 Radial†	1.4	588.9	179.35	ug/L	179.35	ppb	21:06:21
2	Sr 421.552†	2227.9	2027.9	12.479	ug/L	12.479	ppb	21:06:21
2	Sc 361.383	999698.8	999698.8	100.78	%			21:07:44
2	Y 371.029	893509.2	893509.2	103.90	%			21:07:44
2	Ag 328.068†	-840.0	-1208.0	0.7477	ug/L	0.7477	ppb	21:07:49
2	As 188.979†	-39.1	-2.3	7.2720	ug/L	7.2720	ppb	21:08:09
2	B 249.677†	73.8	414.3	6.6067	ug/L	6.6067	ppb	21:07:49
2	Ba 233.527†	9212.6	9157.9	74.868	ug/L	74.868	ppb	21:07:49
2	Be 313.107†	-5952.2	-1103.9	0.6606	ug/L	0.6606	ppb	21:07:49
2	Cd 226.502†	2.8	186.4	0.2495	ug/L	0.2495	ppb	21:08:09
2	Co 228.616†	151.9	219.7	3.4411	ug/L	3.4411	ppb	21:08:09
2	Cr 267.716†	685.9	611.3	6.8634	ug/L	6.8634	ppb	21:08:09
2	Cu 324.752†	11287.9	2230.7	7.2627	ug/L	7.2627	ppb	21:07:49
2	Mn 257.610†	530239.5	525578.3	592.39	ug/L	592.39	ppb	21:07:44
2	Mo 202.031†	24.6	13.8	2.3500	ug/L	2.3500	ppb	21:08:09
2	Ni 231.604†	353.8	270.6	6.5478	ug/L	6.5478	ppb	21:08:09

2	P 214.914†	530.1	277.4	139.06	ug/L	139.06 ppb	21:08:09
2	Pb 220.353†	183.7	227.5	26.831	ug/L	26.831 ppb	21:08:09
2	S 181.975 Axial†	87.2	43.8	57.847	ug/L	57.847 ppb	21:08:09
2	Sb 206.836†	31.5	-3.6	-2.3381	ug/L	-2.3381 ppb	21:08:09
2	Se 196.026†	-98.5	-74.0	18.703	ug/L	18.703 ppb	21:08:09
2	Si 251.611†	199804.8	197859.6	6044.1	ug/L	6044.1 ppb	21:07:44
2	Sn 189.927†	-6.2	-7.3	-0.7810	ug/L	-0.7810 ppb	21:08:09
2	Ti 334.940†	310181.7	308803.2	468.51	ug/L	468.51 ppb	21:07:44
2	Tl 190.801†	-71.1	-25.5	-1.6044	ug/L	-1.6044 ppb	21:08:09
2	U 409.014†	-4401.5	-1573.8	-42.221	ug/L	-42.221 ppb	21:07:44
2	V 292.402†	2166.5	3616.0	20.395	ug/L	20.395 ppb	21:07:49
2	Zn 213.857†	9426.7	8433.2	75.203	ug/L	75.203 ppb	21:07:49
2	SiO2†	199561.5	197624.1	12889	ug/L	12889 ppb	21:08:50
3	Sc Radial	5728.6	5728.6	109	%		21:06:46
3	Y RADIAL	6199.8	6199.8	112.3	%		21:06:46
3	Al 396.153Radial†	7122.1	6664.7	5383.7	ug/L	5383.7 ppb	21:06:46
3	Ca 317.933Radial†	1012.4	911.5	1517.3	ug/L	1517.3 ppb	21:07:06
3	Fe 238.204 Radial†	1995.2	1827.0	17519	ug/L	17519 ppb	21:07:06
3	K 766.490 Radial†	8364.0	5040.1	909.30	ug/L	909.30 ppb	21:06:46
3	Mg 279.077 IEC†	35.6	31.4	1181.3	ug/L	1181.3 ppb	21:07:06
3	Na 589.592 Radial†	26.5	612.0	186.39	ug/L	186.39 ppb	21:06:46
3	Sr 421.552†	2256.6	2011.0	12.375	ug/L	12.375 ppb	21:06:46
3	Sc 361.383	1001379.1	1001379.1	100.95	%		21:08:14
3	Y 371.029	895926.1	895926.1	104.18	%		21:08:14
3	Ag 328.068†	-738.0	-1105.6	1.0887	ug/L	1.0887 ppb	21:08:19
3	As 188.979†	-39.7	-2.8	6.9987	ug/L	6.9987 ppb	21:08:39
3	B 249.677†	102.1	442.2	7.2952	ug/L	7.2952 ppb	21:08:19
3	Ba 233.527†	9258.7	9188.2	75.106	ug/L	75.106 ppb	21:08:19
3	Be 313.107†	-6012.2	-1153.4	0.6424	ug/L	0.6424 ppb	21:08:19
3	Cd 226.502†	-1.8	181.8	0.2284	ug/L	0.2284 ppb	21:08:39
3	Co 228.616†	143.0	210.7	3.2560	ug/L	3.2560 ppb	21:08:39
3	Cr 267.716†	708.7	632.8	7.0846	ug/L	7.0846 ppb	21:08:39
3	Cu 324.752†	11467.1	2389.4	7.6941	ug/L	7.6941 ppb	21:08:19
3	Mn 257.610†	530588.9	525041.6	591.76	ug/L	591.76 ppb	21:08:14
3	Mo 202.031†	33.0	22.1	2.8961	ug/L	2.8961 ppb	21:08:39
3	Ni 231.604†	345.9	262.2	6.3449	ug/L	6.3449 ppb	21:08:39
3	P 214.914†	530.4	276.7	138.84	ug/L	138.84 ppb	21:08:39
3	Pb 220.353†	168.5	212.1	25.000	ug/L	25.000 ppb	21:08:39
3	S 181.975 Axial†	89.5	45.9	60.613	ug/L	60.613 ppb	21:08:39
3	Sb 206.836†	34.8	-0.4	-1.2762	ug/L	-1.2762 ppb	21:08:39
3	Se 196.026†	-100.4	-75.7	16.805	ug/L	16.805 ppb	21:08:39
3	Si 251.611†	199917.7	197638.7	6037.3	ug/L	6037.3 ppb	21:08:14
3	Sn 189.927†	-3.4	-4.5	-0.2933	ug/L	-0.2933 ppb	21:08:39
3	Ti 334.940†	310657.0	308757.6	468.43	ug/L	468.43 ppb	21:08:14
3	Tl 190.801†	-59.8	-14.3	2.0296	ug/L	2.0296 ppb	21:08:39
3	U 409.014†	-4307.9	-1473.7	-39.635	ug/L	-39.635 ppb	21:08:14
3	V 292.402†	2236.4	3681.7	20.878	ug/L	20.878 ppb	21:08:19
3	Zn 213.857†	9486.3	8476.6	75.627	ug/L	75.627 ppb	21:08:19
3	SiO2†	198304.0	196046.1	12786	ug/L	12786 ppb	21:08:55

Mean Data: 1202011878|940165|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1002611.4	101.07	%	0.372				0.37%
Sc Radial	5655.0	107	%	1.2				1.14%
Y 371.029	896014.1	104.19	%	0.297				0.28%
Y RADIAL	6125.8	110.9	%	1.16				1.05%
Ag 328.068†	-1190.9	0.8043	ug/L	0.26071	0.8043	ppb	0.26071	32.41%
Al 396.153Radial†	6687.5	5402.2	ug/L	18.62	5402.2	ppb	18.62	0.34%
As 188.979†	-1.8	7.4690	ug/L	0.59384	7.4690	ppb	0.59384	7.95%
B 249.677†	429.4	6.9610	ug/L	0.34466	6.9610	ppb	0.34466	4.95%
Ba 233.527†	9161.8	74.899	ug/L	0.1945	74.899	ppb	0.1945	0.26%
Be 313.107†	-1144.5	0.6465	ug/L	0.01253	0.6465	ppb	0.01253	1.94%
Ca 317.933Radial†	927.5	1544.0	ug/L	23.98	1544.0	ppb	23.98	1.55%
Cd 226.502†	182.7	0.2133	ug/L	0.04578	0.2133	ppb	0.04578	21.47%
Co 228.616†	217.0	3.3843	ug/L	0.11138	3.3843	ppb	0.11138	3.29%
Cr 267.716†	625.8	7.0154	ug/L	0.13181	7.0154	ppb	0.13181	1.88%
Cu 324.752†	2316.1	7.5008	ug/L	0.21914	7.5008	ppb	0.21914	2.92%
Fe 238.204 Radial†	1852.2	17760	ug/L	221.0	17760	ppb	221.0	1.24%
K 766.490 Radial†	5079.9	916.48	ug/L	7.368	916.48	ppb	7.368	0.80%

Mg 279.077 IEC†	30.3	1137.5	ug/L	38.15	1137.5	ppb	38.15	3.35%
Mn 257.610†	525712.0	592.53	ug/L	0.860	592.53	ppb	0.860	0.15%
Mo 202.031†	20.7	2.8181	ug/L	0.43435	2.8181	ppb	0.43435	15.41%
Na 589.592 Radial†	602.1	183.35	ug/L	3.614	183.35	ppb	3.614	1.97%
Ni 231.604†	265.0	6.4112	ug/L	0.11827	6.4112	ppb	0.11827	1.84%
P 214.914†	279.8	140.39	ug/L	2.501	140.39	ppb	2.501	1.78%
Pb 220.353†	216.2	25.478	ug/L	1.1881	25.478	ppb	1.1881	4.66%
S 181.975 Axial†	44.9	59.330	ug/L	1.3939	59.330	ppb	1.3939	2.35%
Sb 206.836†	-0.4	-1.3004	ug/L	1.02582	-1.3004	ppb	1.02582	78.89%
Se 196.026†	-74.6	18.208	ug/L	1.2327	18.208	ppb	1.2327	6.77%
Si 251.611†	197934.7	6046.4	ug/L	10.38	6046.4	ppb	10.38	0.17%
Sn 189.927†	-4.2	-0.2309	ug/L	0.58382	-0.2309	ppb	0.58382	252.86%
Sr 421.552†	2020.2	12.432	ug/L	0.0525	12.432	ppb	0.0525	0.42%
Ti 334.940†	309025.7	468.84	ug/L	0.649	468.84	ppb	0.649	0.14%
Tl 190.801†	-20.6	-0.0082	ug/L	1.85682	-0.0082	ppb	1.85682	>999.9%
U 409.014†	-1527.5	-41.034	ug/L	1.3062	-41.034	ppb	1.3062	3.18%
V 292.402†	3644.1	20.594	ug/L	0.2528	20.594	ppb	0.2528	1.23%
Zn 213.857†	8447.6	75.339	ug/L	0.2497	75.339	ppb	0.2497	0.33%
SiO2†	197032.8	12851	ug/L	56.1	12851	ppb	56.1	0.44%

Sequence No.: 37
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 1/29/2010 21:39:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	5468.1	5468.1	104	%			21:41:25
1	Y RADIAL	5685.6	5685.6	102.9	%			21:41:25
1	Al 396.153Radial†	6237.9	6124.1	4922.6	ug/L	4922.6	ppb	21:41:25
1	Ca 317.933Radial†	3193.5	3059.8	5093.5	ug/L	5093.5	ppb	21:41:45
1	Fe 238.204 Radial†	574.2	543.9	5230.3	ug/L	5230.3	ppb	21:41:45
1	K 766.490 Radial†	32036.4	28241.6	5093.3	ug/L	5093.3	ppb	21:41:25
1	Mg 279.077 IEC†	146.2	139.6	5330.9	ug/L	5330.9	ppb	21:41:45
1	Na 589.592 Radial†	33827.9	33218.6	10117	ug/L	10117	ppb	21:41:25
1	Sr 421.552†	85500.9	82408.7	507.54	ug/L	507.54	ppb	21:41:25
1	Sc 361.383	986879.0	986879.0	99.485	%			21:42:43
1	Y 371.029	845556.4	845556.4	98.325	%			21:42:43
1	Ag 328.068†	120566.2	120815.5	515.98	ug/L	515.98	ppb	21:42:48
1	As 188.979†	1187.1	1229.8	510.00	ug/L	510.00	ppb	21:43:08
1	B 249.677†	21809.0	22262.9	508.84	ug/L	508.84	ppb	21:42:48
1	Ba 233.527†	63053.5	63396.1	515.46	ug/L	515.46	ppb	21:42:48
1	Be 313.107†	1405281.3	1417355.6	518.32	ug/L	518.32	ppb	21:42:43
1	Cd 226.502†	45598.3	46017.8	516.65	ug/L	516.65	ppb	21:42:48
1	Co 228.616†	24201.3	24395.6	515.66	ug/L	515.66	ppb	21:42:48
1	Cr 267.716†	48466.0	48647.5	515.36	ug/L	515.36	ppb	21:42:48
1	Cu 324.752†	189407.0	181417.0	512.18	ug/L	512.18	ppb	21:42:48
1	Mn 257.610†	459092.8	460898.3	518.28	ug/L	518.28	ppb	21:42:43
1	Mo 202.031†	7342.9	7370.3	506.60	ug/L	506.60	ppb	21:43:08
1	Ni 231.604†	21281.6	21311.3	515.52	ug/L	515.52	ppb	21:42:48
1	P 214.914†	4777.1	4553.1	2416.6	ug/L	2416.6	ppb	21:43:08
1	Pb 220.353†	4169.6	4236.3	510.94	ug/L	510.94	ppb	21:43:08
1	S 181.975 Axial†	800.2	761.6	1021.9	ug/L	1021.9	ppb	21:43:08
1	Sb 206.836†	1586.9	1560.2	519.35	ug/L	519.35	ppb	21:43:08
1	Se 196.026†	916.9	945.4	537.02	ug/L	537.02	ppb	21:43:08
1	Si 251.611†	84281.4	84313.9	2569.3	ug/L	2569.3	ppb	21:42:48
1	Sn 189.927†	2755.7	2768.8	503.10	ug/L	503.10	ppb	21:43:08
1	Ti 334.940†	337403.3	340163.9	515.78	ug/L	515.78	ppb	21:42:43
1	Tl 190.801†	1526.1	1579.0	514.53	ug/L	514.53	ppb	21:43:08
1	U 409.014†	17536.0	20420.5	519.57	ug/L	519.57	ppb	21:42:48
1	V 292.402†	76909.0	78773.2	519.31	ug/L	519.31	ppb	21:42:48
1	Zn 213.857†	57052.4	56426.8	510.59	ug/L	510.59	ppb	21:42:48
1	SiO2†	82888.9	82920.2	5394.3	ug/L	5394.3	ppb	21:44:16
2	Sc Radial	5513.1	5513.1	105	%			21:41:50
2	Y RADIAL	5819.7	5819.7	105.4	%			21:41:50
2	Al 396.153Radial†	6287.2	6122.1	4920.7	ug/L	4920.7	ppb	21:41:50
2	Ca 317.933Radial†	3202.6	3043.4	5066.1	ug/L	5066.1	ppb	21:42:10
2	Fe 238.204 Radial†	575.3	540.3	5196.2	ug/L	5196.2	ppb	21:42:10
2	K 766.490 Radial†	32236.0	28180.3	5082.2	ug/L	5082.2	ppb	21:41:50
2	Mg 279.077 IEC†	146.6	138.9	5304.2	ug/L	5304.2	ppb	21:42:10
2	Na 589.592 Radial†	34109.4	33221.5	10117	ug/L	10117	ppb	21:41:50
2	Sr 421.552†	86153.6	82360.0	507.24	ug/L	507.24	ppb	21:41:50
2	Sc 361.383	985512.6	985512.6	99.347	%			21:43:14
2	Y 371.029	845189.5	845189.5	98.282	%			21:43:14
2	Ag 328.068†	119757.9	120169.9	513.23	ug/L	513.23	ppb	21:43:19
2	As 188.979†	1192.8	1237.2	513.02	ug/L	513.02	ppb	21:43:39
2	B 249.677†	21616.5	22099.6	505.10	ug/L	505.10	ppb	21:43:19
2	Ba 233.527†	62543.3	62970.4	512.00	ug/L	512.00	ppb	21:43:19
2	Be 313.107†	1403157.4	1417176.2	518.25	ug/L	518.25	ppb	21:43:14
2	Cd 226.502†	45234.9	45715.6	513.26	ug/L	513.26	ppb	21:43:19
2	Co 228.616†	24023.6	24250.5	512.61	ug/L	512.61	ppb	21:43:19
2	Cr 267.716†	48089.3	48335.9	512.06	ug/L	512.06	ppb	21:43:19
2	Cu 324.752†	187807.1	180070.6	508.39	ug/L	508.39	ppb	21:43:19
2	Mn 257.610†	457859.9	460297.1	517.61	ug/L	517.61	ppb	21:43:14
2	Mo 202.031†	7386.8	7424.8	510.34	ug/L	510.34	ppb	21:43:39
2	Ni 231.604†	21213.6	21272.5	514.58	ug/L	514.58	ppb	21:43:19

2	P 214.914†	4800.8	4583.6	2434.3 ug/L	2434.3 ppb	21:43:39
2	Pb 220.353†	4162.1	4234.5	510.74 ug/L	510.74 ppb	21:43:39
2	S 181.975 Axial†	796.5	759.0	1018.4 ug/L	1018.4 ppb	21:43:39
2	Sb 206.836†	1608.7	1584.4	527.26 ug/L	527.26 ppb	21:43:39
2	Se 196.026†	904.9	934.6	531.01 ug/L	531.01 ppb	21:43:39
2	Si 251.611†	83643.8	83789.5	2553.3 ug/L	2553.3 ppb	21:43:19
2	Sn 189.927†	2779.1	2796.2	508.07 ug/L	508.07 ppb	21:43:39
2	Ti 334.940†	336638.8	339864.5	515.33 ug/L	515.33 ppb	21:43:14
2	Tl 190.801†	1545.8	1601.0	521.64 ug/L	521.64 ppb	21:43:39
2	U 409.014†	17045.9	19951.7	507.61 ug/L	507.61 ppb	21:43:19
2	V 292.402†	76353.1	78320.9	516.41 ug/L	516.41 ppb	21:43:19
2	Zn 213.857†	56575.3	56026.1	506.95 ug/L	506.95 ppb	21:43:19
2	SiO2†	83878.3	84031.5	5466.7 ug/L	5466.7 ppb	21:44:21
3	Sc Radial	5429.6	5429.6	103 %		21:42:15
3	Y RADIAL	5682.4	5682.4	102.9 %		21:42:15
3	Al 396.153Radial†	6216.2	6145.7	4939.8 ug/L	4939.8 ppb	21:42:15
3	Ca 317.933Radial†	3191.5	3079.7	5126.6 ug/L	5126.6 ppb	21:42:35
3	Fe 238.204 Radial†	572.9	546.4	5255.0 ug/L	5255.0 ppb	21:42:35
3	K 766.490 Radial†	31675.3	28110.3	5069.6 ug/L	5069.6 ppb	21:42:15
3	Mg 279.077 IEC†	142.8	137.3	5243.8 ug/L	5243.8 ppb	21:42:35
3	Na 589.592 Radial†	33419.1	33053.1	10066 ug/L	10066 ppb	21:42:15
3	Sr 421.552†	84375.0	81900.7	504.41 ug/L	504.41 ppb	21:42:15
3	Sc 361.383	982207.1	982207.1	99.014 %		21:43:45
3	Y 371.029	843800.3	843800.3	98.121 %		21:43:45
3	Ag 328.068†	118933.7	119743.2	511.44 ug/L	511.44 ppb	21:43:50
3	As 188.979†	1184.8	1233.1	511.35 ug/L	511.35 ppb	21:44:10
3	B 249.677†	21487.3	22042.3	503.78 ug/L	503.78 ppb	21:43:50
3	Ba 233.527†	62193.0	62828.5	510.85 ug/L	510.85 ppb	21:43:50
3	Be 313.107†	1400380.5	1419124.8	518.96 ug/L	518.96 ppb	21:43:45
3	Cd 226.502†	45010.3	45641.9	512.43 ug/L	512.43 ppb	21:43:50
3	Co 228.616†	23844.0	24150.4	510.49 ug/L	510.49 ppb	21:43:50
3	Cr 267.716†	47858.6	48265.8	511.32 ug/L	511.32 ppb	21:43:50
3	Cu 324.752†	186152.0	179035.2	505.47 ug/L	505.47 ppb	21:43:50
3	Mn 257.610†	455418.0	459381.9	516.58 ug/L	516.58 ppb	21:43:45
3	Mo 202.031†	7367.9	7430.7	510.75 ug/L	510.75 ppb	21:44:10
3	Ni 231.604†	21048.7	21177.8	512.29 ug/L	512.29 ppb	21:43:50
3	P 214.914†	4800.4	4599.5	2443.6 ug/L	2443.6 ppb	21:44:10
3	Pb 220.353†	4176.1	4262.8	514.14 ug/L	514.14 ppb	21:44:10
3	S 181.975 Axial†	793.6	758.7	1018.0 ug/L	1018.0 ppb	21:44:10
3	Sb 206.836†	1594.9	1575.9	524.49 ug/L	524.49 ppb	21:44:10
3	Se 196.026†	892.3	924.9	525.92 ug/L	525.92 ppb	21:44:10
3	Si 251.611†	82887.3	83308.9	2538.6 ug/L	2538.6 ppb	21:43:50
3	Sn 189.927†	2749.3	2775.5	504.33 ug/L	504.33 ppb	21:44:10
3	Ti 334.940†	335383.9	339737.6	515.15 ug/L	515.15 ppb	21:43:45
3	Tl 190.801†	1525.8	1586.0	516.80 ug/L	516.80 ppb	21:44:10
3	U 409.014†	17016.1	19979.3	508.31 ug/L	508.31 ppb	21:43:50
3	V 292.402†	76089.7	78313.5	516.36 ug/L	516.36 ppb	21:43:50
3	Zn 213.857†	56407.8	56048.6	507.17 ug/L	507.17 ppb	21:43:50
3	SiO2†	83573.5	84007.9	5465.1 ug/L	5465.1 ppb	21:44:26

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	984866.2	99.282	%	0.2421				0.24%
Sc Radial	5470.3	104	%	0.8				0.76%
Y 371.029	844848.7	98.243	%	0.1077				0.11%
Y RADIAL	5729.2	103.7	%	1.42				1.37%
Ag 328.068†	120242.9	513.55	ug/L	2.290	513.55	ppb	2.290	0.45%
QC value within limits for Ag 328.068 Recovery = 102.71%								
Al 396.153Radial†	6130.6	4927.7	ug/L	10.52	4927.7	ppb	10.52	0.21%
QC value within limits for Al 396.153Radial Recovery = 98.55%								
As 188.979†	1233.3	511.46	ug/L	1.516	511.46	ppb	1.516	0.30%
QC value within limits for As 188.979 Recovery = 102.29%								
B 249.677†	22135.0	505.91	ug/L	2.622	505.91	ppb	2.622	0.52%
QC value within limits for B 249.677 Recovery = 101.18%								
Ba 233.527†	63065.0	512.77	ug/L	2.399	512.77	ppb	2.399	0.47%
QC value within limits for Ba 233.527 Recovery = 102.55%								
Be 313.107†	1417885.5	518.51	ug/L	0.392	518.51	ppb	0.392	0.08%
QC value within limits for Be 313.107 Recovery = 103.70%								
Ca 317.933Radial†	3061.0	5095.4	ug/L	30.30	5095.4	ppb	30.30	0.59%

QC value within limits for Ca 317.933Radial Recovery = 101.91%

Cd 226.502†	45791.8	514.11 ug/L	2.239	514.11 ppb	2.239	0.44%

QC value within limits for Cd 226.502 Recovery = 102.82%

Co 228.616†	24265.5	512.92 ug/L	2.600	512.92 ppb	2.600	0.51%

QC value within limits for Co 228.616 Recovery = 102.58%

Cr 267.716†	48416.4	512.91 ug/L	2.150	512.91 ppb	2.150	0.42%

QC value within limits for Cr 267.716 Recovery = 102.58%

Cu 324.752†	180174.3	508.68 ug/L	3.368	508.68 ppb	3.368	0.66%

QC value within limits for Cu 324.752 Recovery = 101.74%

Fe 238.204 Radial†	543.5	5227.2 ug/L	29.55	5227.2 ppb	29.55	0.57%

QC value within limits for Fe 238.204 Radial Recovery = 104.54%

K 766.490 Radial†	28177.4	5081.7 ug/L	11.86	5081.7 ppb	11.86	0.23%

QC value within limits for K 766.490 Radial Recovery = 101.63%

Mg 279.077 IEC†	138.6	5292.9 ug/L	44.63	5292.9 ppb	44.63	0.84%

QC value within limits for Mg 279.077 IEC Recovery = 105.86%

Mn 257.610†	460192.4	517.49 ug/L	0.855	517.49 ppb	0.855	0.17%

QC value within limits for Mn 257.610 Recovery = 103.50%

Mo 202.031†	7408.6	509.23 ug/L	2.287	509.23 ppb	2.287	0.45%

QC value within limits for Mo 202.031 Recovery = 101.85%

Na 589.592 Radial†	33164.4	10100 ug/L	29.3	10100 ppb	29.3	0.29%

QC value within limits for Na 589.592 Radial Recovery = 101.00%

Ni 231.604†	21253.8	514.13 ug/L	1.661	514.13 ppb	1.661	0.32%

QC value within limits for Ni 231.604 Recovery = 102.83%

P 214.914†	4578.7	2431.5 ug/L	13.71	2431.5 ppb	13.71	0.56%

QC value within limits for P 214.914 Recovery = 97.26%

Pb 220.353†	4244.5	511.94 ug/L	1.907	511.94 ppb	1.907	0.37%

QC value within limits for Pb 220.353 Recovery = 102.39%

S 181.975 Axial†	759.8	1019.4 ug/L	2.11	1019.4 ppb	2.11	0.21%

QC value within limits for S 181.975 Axial Recovery = 101.94%

Sb 206.836†	1573.5	523.70 ug/L	4.013	523.70 ppb	4.013	0.77%

QC value within limits for Sb 206.836 Recovery = 104.74%

Se 196.026†	934.9	531.32 ug/L	5.557	531.32 ppb	5.557	1.05%

QC value within limits for Se 196.026 Recovery = 106.26%

Si 251.611†	83804.1	2553.7 ug/L	15.38	2553.7 ppb	15.38	0.60%

QC value within limits for Si 251.611 Recovery = 102.15%

Sn 189.927†	2780.2	505.17 ug/L	2.590	505.17 ppb	2.590	0.51%

QC value within limits for Sn 189.927 Recovery = 101.03%

Sr 421.552†	82223.1	506.40 ug/L	1.727	506.40 ppb	1.727	0.34%

QC value within limits for Sr 421.552 Recovery = 101.28%

Ti 334.940†	339922.0	515.42 ug/L	0.324	515.42 ppb	0.324	0.06%

QC value within limits for Ti 334.940 Recovery = 103.08%

Tl 190.801†	1588.7	517.66 ug/L	3.629	517.66 ppb	3.629	0.70%

QC value within limits for Tl 190.801 Recovery = 103.53%

U 409.014†	20117.2	511.83 ug/L	6.711	511.83 ppb	6.711	1.31%

QC value within limits for U 409.014 Recovery = 102.37%

V 292.402†	78469.2	517.36 ug/L	1.693	517.36 ppb	1.693	0.33%

QC value within limits for V 292.402 Recovery = 103.47%

Zn 213.857†	56167.2	508.24 ug/L	2.043	508.24 ppb	2.043	0.40%

QC value within limits for Zn 213.857 Recovery = 101.65%

SiO2†	83653.2	5442.0 ug/L	41.35	5442.0 ppb	41.35	0.76%

QC value within limits for SiO2 Recovery = 101.77%

All analyte(s) passed QC.

Sequence No.: 38
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 1/29/2010 21:46:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	5446.8	5446.8	103	%			21:48:28
1	Y RADIAL	5746.7	5746.7	104.0	%			21:48:28
1	Al 396.153Radial†	-105.8	4.4	3.5634	ug/L	3.5634	ppb	21:48:48
1	Ca 317.933Radial†	17.6	-3.6	-6.0208	ug/L	-6.0208	ppb	21:48:48
1	Fe 238.204 Radial†	9.9	-0.4	-4.2468	ug/L	-4.2468	ppb	21:48:48
1	K 766.490 Radial†	2645.3	-99.5	-17.947	ug/L	-17.947	ppb	21:48:28
1	Mg 279.077 IEC†	2.9	1.4	53.526	ug/L	53.526	ppb	21:48:48
1	Na 589.592 Radial†	-761.8	-150.1	-45.710	ug/L	-45.710	ppb	21:48:28
1	Sr 421.552†	50.5	-17.8	-0.1095	ug/L	-0.1095	ppb	21:48:28
1	Sc 361.383	979296.8	979296.8	98.721	%			21:49:45
1	Y 371.029	849865.8	849865.8	98.826	%			21:49:45
1	Ag 328.068†	478.9	110.6	0.4745	ug/L	0.4745	ppb	21:49:50
1	As 188.979†	-32.6	3.5	1.4501	ug/L	1.4501	ppb	21:50:10
1	B 249.677†	-153.2	185.9	4.2698	ug/L	4.2698	ppb	21:50:10
1	Ba 233.527†	-2.3	14.0	0.1143	ug/L	0.1143	ppb	21:50:10
1	Be 313.107†	-4579.2	163.9	0.0598	ug/L	0.0598	ppb	21:49:50
1	Cd 226.502†	-183.6	-2.4	-0.0279	ug/L	-0.0279	ppb	21:50:10
1	Co 228.616†	-74.5	-6.4	-0.1345	ug/L	-0.1345	ppb	21:50:10
1	Cr 267.716†	77.5	9.2	0.1006	ug/L	0.1006	ppb	21:50:10
1	Cu 324.752†	9014.0	160.7	0.4572	ug/L	0.4572	ppb	21:49:50
1	Mn 257.610†	583.4	20.8	0.0208	ug/L	0.0208	ppb	21:50:10
1	Mo 202.031†	10.8	0.4	0.0242	ug/L	0.0242	ppb	21:50:10
1	Ni 231.604†	91.0	11.8	0.2845	ug/L	0.2845	ppb	21:50:10
1	P 214.914†	248.1	2.6	1.3679	ug/L	1.3679	ppb	21:50:10
1	Pb 220.353†	-47.3	-2.8	-0.3368	ug/L	-0.3368	ppb	21:50:10
1	S 181.975 Axial†	45.5	3.4	4.5003	ug/L	4.5003	ppb	21:50:10
1	Sb 206.836†	41.3	7.0	2.2689	ug/L	2.2689	ppb	21:50:10
1	Se 196.026†	-20.4	3.1	1.6847	ug/L	1.6847	ppb	21:50:10
1	Si 251.611†	552.6	156.1	4.7680	ug/L	4.7680	ppb	21:50:10
1	Sn 189.927†	9.4	8.5	1.5318	ug/L	1.5318	ppb	21:50:10
1	Ti 334.940†	-1009.2	-7.6	-0.0139	ug/L	-0.0139	ppb	21:49:50
1	Tl 190.801†	-41.3	3.2	1.0312	ug/L	1.0312	ppb	21:50:10
1	U 409.014†	-3011.3	-256.5	-6.5471	ug/L	-6.5471	ppb	21:49:50
1	V 292.402†	-1410.2	37.8	0.2353	ug/L	0.2353	ppb	21:49:50
1	Zn 213.857†	1014.7	107.1	0.9756	ug/L	0.9756	ppb	21:50:10
1	SiO2†	570.4	180.1	11.749	ug/L	11.749	ppb	21:51:16
2	Sc Radial	5504.2	5504.2	104	%			21:48:53
2	Y RADIAL	5799.5	5799.5	105.0	%			21:48:53
2	Al 396.153Radial†	-124.9	-12.8	-10.349	ug/L	-10.349	ppb	21:49:13
2	Ca 317.933Radial†	22.6	1.0	1.6074	ug/L	1.6074	ppb	21:49:13
2	Fe 238.204 Radial†	8.7	-1.7	-16.320	ug/L	-16.320	ppb	21:49:13
2	K 766.490 Radial†	2771.4	-5.3	-0.9576	ug/L	-0.9576	ppb	21:48:53
2	Mg 279.077 IEC†	4.9	3.4	128.32	ug/L	128.32	ppb	21:49:13
2	Na 589.592 Radial†	-637.4	-23.1	-7.0460	ug/L	-7.0460	ppb	21:48:53
2	Sr 421.552†	66.3	-3.2	-0.0200	ug/L	-0.0200	ppb	21:48:53
2	Sc 361.383	991183.3	991183.3	99.919	%			21:50:15
2	Y 371.029	861571.0	861571.0	100.19	%			21:50:15
2	Ag 328.068†	459.5	85.4	0.3620	ug/L	0.3620	ppb	21:50:20
2	As 188.979†	-34.5	2.0	0.8033	ug/L	0.8033	ppb	21:50:40
2	B 249.677†	-165.1	175.9	4.0398	ug/L	4.0398	ppb	21:50:40
2	Ba 233.527†	-16.1	0.3	0.0020	ug/L	0.0020	ppb	21:50:40
2	Be 313.107†	-4616.4	182.3	0.0665	ug/L	0.0665	ppb	21:50:20
2	Cd 226.502†	-178.8	4.6	0.0526	ug/L	0.0526	ppb	21:50:40
2	Co 228.616†	-58.1	10.9	0.2307	ug/L	0.2307	ppb	21:50:40
2	Cr 267.716†	64.5	-4.8	-0.0482	ug/L	-0.0482	ppb	21:50:40
2	Cu 324.752†	8972.4	9.6	0.0294	ug/L	0.0294	ppb	21:50:20
2	Mn 257.610†	578.2	8.5	0.0027	ug/L	0.0027	ppb	21:50:40
2	Mo 202.031†	15.5	4.9	0.3366	ug/L	0.3366	ppb	21:50:40
2	Ni 231.604†	81.0	0.6	0.0155	ug/L	0.0155	ppb	21:50:40

2	P 214.914†	240.2	-8.3	-4.5739	ug/L	-4.5739	ppb	21:50:40
2	Pb 220.353†	-35.3	9.8	1.1734	ug/L	1.1734	ppb	21:50:40
2	S 181.975 Axial†	45.8	3.1	4.1087	ug/L	4.1087	ppb	21:50:40
2	Sb 206.836†	39.6	4.8	1.5550	ug/L	1.5550	ppb	21:50:40
2	Se 196.026†	-15.1	8.7	4.6868	ug/L	4.6868	ppb	21:50:40
2	Si 251.611†	514.5	111.2	3.3942	ug/L	3.3942	ppb	21:50:40
2	Sn 189.927†	6.3	5.2	0.9485	ug/L	0.9485	ppb	21:50:40
2	Ti 334.940†	-1006.8	7.0	0.0030	ug/L	0.0030	ppb	21:50:20
2	Tl 190.801†	-46.5	-1.5	-0.4837	ug/L	-0.4837	ppb	21:50:40
2	U 409.014†	-3021.9	-230.5	-5.8836	ug/L	-5.8836	ppb	21:50:20
2	V 292.402†	-1459.3	5.8	0.0360	ug/L	0.0360	ppb	21:50:20
2	Zn 213.857†	1020.9	100.9	0.9225	ug/L	0.9225	ppb	21:50:40
2	SiO2†	545.6	148.4	9.6687	ug/L	9.6687	ppb	21:51:21
3	Sc Radial	5571.4	5571.4	106	%			21:49:18
3	Y RADIAL	5853.3	5853.3	106.0	%			21:49:18
3	Al 396.153Radial†	-110.0	2.7	2.1928	ug/L	2.1928	ppb	21:49:38
3	Ca 317.933Radial†	21.1	-0.7	-1.1288	ug/L	-1.1288	ppb	21:49:38
3	Fe 238.204 Radial†	9.8	-0.8	-7.3091	ug/L	-7.3091	ppb	21:49:38
3	K 766.490 Radial†	2784.6	-25.0	-4.4920	ug/L	-4.4920	ppb	21:49:18
3	Mg 279.077 IEC†	-0.4	-1.7	-66.622	ug/L	-66.622	ppb	21:49:38
3	Na 589.592 Radial†	-747.3	-119.9	-36.506	ug/L	-36.506	ppb	21:49:18
3	Sr 421.552†	41.4	-27.6	-0.1697	ug/L	-0.1697	ppb	21:49:18
3	Sc 361.383	995101.6	995101.6	100.31	%			21:50:45
3	Y 371.029	863849.5	863849.5	100.45	%			21:50:45
3	Ag 328.068†	327.1	-48.4	-0.2022	ug/L	-0.2022	ppb	21:50:50
3	As 188.979†	-46.3	-9.7	-3.9855	ug/L	-3.9855	ppb	21:51:10
3	B 249.677†	-146.6	195.0	4.4774	ug/L	4.4774	ppb	21:51:10
3	Ba 233.527†	-8.7	7.7	0.0622	ug/L	0.0622	ppb	21:51:10
3	Be 313.107†	-4529.1	287.5	0.1048	ug/L	0.1048	ppb	21:50:50
3	Cd 226.502†	-191.4	-7.2	-0.0814	ug/L	-0.0814	ppb	21:51:10
3	Co 228.616†	-69.6	-0.4	-0.0061	ug/L	-0.0061	ppb	21:51:10
3	Cr 267.716†	59.2	-10.2	-0.1057	ug/L	-0.1057	ppb	21:51:10
3	Cu 324.752†	8904.4	-93.6	-0.2609	ug/L	-0.2609	ppb	21:50:50
3	Mn 257.610†	591.4	19.4	0.0238	ug/L	0.0238	ppb	21:51:10
3	Mo 202.031†	18.1	7.5	0.5142	ug/L	0.5142	ppb	21:51:10
3	Ni 231.604†	97.9	17.1	0.4137	ug/L	0.4137	ppb	21:51:10
3	P 214.914†	251.6	2.2	1.2662	ug/L	1.2662	ppb	21:51:10
3	Pb 220.353†	-50.8	-5.5	-0.6623	ug/L	-0.6623	ppb	21:51:10
3	S 181.975 Axial†	46.8	3.9	5.2664	ug/L	5.2664	ppb	21:51:10
3	Sb 206.836†	45.0	10.0	3.2531	ug/L	3.2531	ppb	21:51:10
3	Se 196.026†	-18.1	5.7	3.1146	ug/L	3.1146	ppb	21:51:10
3	Si 251.611†	537.9	132.6	4.0432	ug/L	4.0432	ppb	21:51:10
3	Sn 189.927†	10.8	9.7	1.7567	ug/L	1.7567	ppb	21:51:10
3	Ti 334.940†	-1036.7	-18.8	-0.0202	ug/L	-0.0202	ppb	21:50:50
3	Tl 190.801†	-49.3	-4.1	-1.3231	ug/L	-1.3231	ppb	21:51:10
3	U 409.014†	-3071.7	-268.3	-6.8488	ug/L	-6.8488	ppb	21:50:50
3	V 292.402†	-1470.6	0.2	-0.0045	ug/L	-0.0045	ppb	21:50:50
3	Zn 213.857†	1029.7	105.7	0.9631	ug/L	0.9631	ppb	21:51:10
3	SiO2†	560.9	161.4	10.513	ug/L	10.513	ppb	21:51:26

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	988527.2	99.651	%	0.8297				0.83%
Sc Radial	5507.5	104	%	1.2				1.13%
Y 371.029	858428.8	99.822	%	0.8725				0.87%
Y RADIAL	5799.9	105.0	%	0.97				0.92%
Ag 328.068†	49.2	0.2114	ug/L	0.36261	0.2114	ppb	0.36261	171.53%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.9	-1.5309	ug/L	7.66739	-1.5309	ppb	7.66739	500.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.4	-0.5774	ug/L	2.96920	-0.5774	ppb	2.96920	514.25%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	185.6	4.2623	ug/L	0.21891	4.2623	ppb	0.21891	5.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.3	0.0595	ug/L	0.05617	0.0595	ppb	0.05617	94.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	211.3	0.0771	ug/L	0.02430	0.0771	ppb	0.02430	31.54%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.1	-1.8474	ug/L	3.86452	-1.8474	ppb	3.86452	209.19%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              -1.7     -0.0189 ug/L       0.06746     -0.0189 ppb        0.06746 356.48%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               1.4      0.0300 ug/L       0.18528      0.0300 ppb        0.18528 616.84%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -1.9     -0.0178 ug/L       0.10645     -0.0178 ppb        0.10645 598.46%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              25.6      0.0752 ug/L       0.36123      0.0752 ppb        0.36123 480.29%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.0     -9.2918 ug/L       6.27583     -9.2918 ppb        6.27583  67.54%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -43.3     -7.7990 ug/L       8.96466     -7.7990 ppb        8.96466 114.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.0      38.407 ug/L      98.3451      38.407 ppb       98.3451 256.06%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              16.2      0.0158 ug/L       0.01140      0.0158 ppb        0.01140  72.26%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               4.3      0.2917 ug/L       0.24809      0.2917 ppb        0.24809  85.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -97.7     -29.754 ug/L      20.1972     -29.754 ppb       20.1972  67.88%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               9.8      0.2379 ug/L       0.20313      0.2379 ppb        0.20313  85.38%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -1.2     -0.6466 ug/L       3.40148     -0.6466 ppb        3.40148 526.05%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               0.5      0.0581 ug/L       0.97946      0.0581 ppb        0.97946 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.4      4.6251 ug/L       0.58889      4.6251 ppb        0.58889  12.73%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.3      2.3590 ug/L       0.85263      2.3590 ppb        0.85263  36.14%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               5.8      3.1620 ug/L       1.50164      3.1620 ppb        1.50164  47.49%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             133.3      4.0685 ug/L       0.68724      4.0685 ppb        0.68724  16.89%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               7.8      1.4124 ug/L       0.41712      1.4124 ppb        0.41712  29.53%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -16.2     -0.0997 ug/L       0.07535     -0.0997 ppb        0.07535  75.54%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -6.5     -0.0104 ug/L       0.01199     -0.0104 ppb        0.01199 115.68%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.8     -0.2586 ug/L       1.19322     -0.2586 ppb        1.19322 461.50%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -251.8     -6.4265 ug/L       0.49374     -6.4265 ppb        0.49374   7.68%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               14.6      0.0889 ug/L       0.12835      0.0889 ppb        0.12835 144.36%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             104.6      0.9537 ug/L       0.02778      0.9537 ppb        0.02778   2.91%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   163.3      10.643 ug/L        1.0461      10.643 ppb         1.0461   9.83%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #6 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, January 19, 2010 23:06:11
Sample Description:
Method File: C:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\091212\Sample.257
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1393.9	1393.868	45.903	3.3
	Mg	24.0	17199.0	17198.956	571.577	3.3
	Co	58.9	33256.3	33256.269	432.567	1.3
	Rh	102.9	59791.7	59791.669	369.600	0.6
	In	114.9	66962.6	66962.573	176.581	0.3
	Pb	208.0	42177.2	42177.179	556.092	1.3
⌈>	Ba	137.9	66102.4	66102.357	501.213	0.8
⌊	Ba++	69.0	1483.9	0.022	0.001	3.0
⌈>	Ce	139.9	84212.7	84212.697	726.544	0.9
⌊	CeO	155.9	1439.8	0.017	0.000	2.0
	Bkgd	220.0	11.8	11.800	3.154	26.7

Current Optimization File Data

Current Value	Description
0.80	Nebulizer Gas Flow
13.75	Lens Voltage
1450.00	ICP RF Power
-1781.25	Analog Stage Voltage
900.00	Pulse Stage Voltage
30.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	11.0	4016.2
Co	59	21	11.5	33387.6
In	115	21	14.0	68286.8

ICPMS #6 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.1	595	2080	0.652
Be	9.0	9.0	2040	2080	0.659
Mg	24.0	23.9	5678	2120	0.618
Mg	25.0	24.9	5909	2080	0.689
Mg	26.0	25.9	6143	2120	0.692
Co	58.9	58.9	14161	2170	0.645
Rh	102.9	103.0	24873	2230	0.690
In	114.9	114.9	27794	2260	0.681
Ce	139.9	139.9	33851	2280	0.735
Pb	206.0	206.0	49960	2430	0.720
Pb	207.0	207.0	50135	2385	0.698
Pb	208.0	208.0	50463	2430	0.713
U	238.1	238.1	57731	2470	0.705

Report Date/Time: Tuesday, January 19, 2010 23:04:30

ICPMS#6 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, January 19, 2010 23:48:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\Blank.001

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		42	
	Be	9		ug/L		14	
	B	11		ug/L		742	
	Na	23		ug/L		12339	
	Mg	24		ug/L		1000	
	Al	27		ug/L		6668	
	P	31		ug/L		5987	
	K	39		ug/L		605664	
	Ca	43		ug/L		381	
>	Sc	45		ug/L		1266114	
	V	51		ug/L		2556	
	Cr	52		ug/L		2190	
	Cr	53		ug/L		67041	
	Mn	55		ug/L		877	
	Fe	57		ug/L		5182	
	Co	59		ug/L		263	
	Ni	60		ug/L		129	
	Cu	63		ug/L		484	
	Cu	65		ug/L		85	
	Zn	66		ug/L		319	
	Zn	67		ug/L		7573	
	Zn	68		ug/L		819	
>	Ge	74		ug/L		205610	
	As	75		ug/L		-108	
	Se	77		ug/L		3199	
	Se	82		ug/L		-28	
	Kr	83		ug/L		101	
	Sr	88		ug/L		97	
	Y	89		ug/L		51	
	Ag	107		ug/L		27	
	Cd	111		ug/L		11	
	Cd	114		ug/L		21	
>	In	115		ug/L		105386	
	Sn	120		ug/L		162	
	Sb	121		ug/L		627	
	Sb	123		ug/L		474	
	Ba	135		ug/L		17	
	Ba	137		ug/L		26	
	Ho	165		ug/L		15	
>	Lu	175		ug/L		148345	
	Tl	205		ug/L		51	
	Pb	208		ug/L		269	
	Bi	209		ug/L		25	
	U	238		ug/L		45	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Tuesday, January 19, 2010 23:51:29

ICPMS#6 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, January 19, 2010 23:54:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\Standard 1.002

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	2.960	6970	0.006
	Be	9	10.000	ug/L	0.409	2903	0.002
	B	11	20.000	ug/L	1.910	5869	0.004
	Na	23	1000.000	ug/L	12.804	3258460	2.713
	Mg	24	1000.000	ug/L	14.178	2136486	1.789
	Al	27	1000.000	ug/L	4.323	3323450	2.776
	P	31	1000.000	ug/L	1.299	181381	0.147
	K	39	1000.000	ug/L	5.196	4295195	3.112
	Ca	43	1000.000	ug/L	1.515	7938	0.006
>	Sc	45		ug/L		1195543	1195542.899
	V	51	10.000	ug/L	8.118	41209	0.032
	Cr	52	10.000	ug/L	2.641	35823	0.028
	Cr	53		ug/L		89066	0.022
	Mn	55	10.000	ug/L	0.735	48264	0.040
	Fe	57	1000.000	ug/L	2.310	98343	0.078
	Co	59	10.000	ug/L	1.441	34971	0.029
	Ni	60	10.000	ug/L	0.599	7345	0.006
	Cu	63		ug/L		17305	0.014
	Cu	65	10.000	ug/L	3.042	8330	0.007
	Zn	66	10.000	ug/L	0.471	5717	0.028
	Zn	67		ug/L		11923	0.025
	Zn	68		ug/L		4881	0.021
>	Ge	74		ug/L		192679	192678.971
	As	75	10.000	ug/L	2.219	6092	0.032
	Se	77		ug/L		4771	0.009
	Se	82	10.000	ug/L	4.614	481	0.003
	Kr	83		ug/L		84	-0.000
	Sr	88	10.000	ug/L	1.141	65251	0.651
	Y	89		ug/L		53	0.000
	Ag	107	10.000	ug/L	1.680	25879	0.258
	Cd	111	10.000	ug/L	1.510	6116	0.061
	Cd	114		ug/L		13893	0.139
>	In	115		ug/L		100027	100026.923
	Sn	120	10.000	ug/L	0.922	25573	0.254
	Sb	121	10.000	ug/L	4.369	22986	0.224
	Sb	123		ug/L		17979	0.175
	Ba	135		ug/L		6293	0.045
	Ba	137	10.000	ug/L	1.240	11044	0.079
	Ho	165		ug/L		14	0.000
>	Lu	175		ug/L		140341	140341.444
	Tl	205	10.000	ug/L	1.990	47457	0.338
	Pb	208	10.000	ug/L	1.321	86256	0.613
	Bi	209		ug/L		26	0.000
	U	238	10.000	ug/L	0.911	98822	0.704

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Tuesday, January 19, 2010 23:57:20

ICPMS#6 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, January 20, 2010 00:00:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\Standard 2.003

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.998**	**ug/L**	3.971	66348	0.058
	Be	9	**100.002**	**ug/L**	3.227	27772	0.024
	B	11	**200.005**	**ug/L**	3.484	50354	0.043
	Na	23	**9998.248**	**ug/L**	7.219	30594899	26.659
	Mg	24	**10004.340**	**ug/L**	3.327	21451476	18.710
	Al	27	**9990.882**	**ug/L**	1.234	29153634	25.414
	P	31	**9992.607**	**ug/L**	2.137	1573716	1.368
	K	39	**9987.779**	**ug/L**	4.972	32319625	27.699
	Ca	43	**9996.987**	**ug/L**	2.167	70885	0.062
>	Sc	45		**ug/L**		1146773	1146772.568
	V	51	**99.956**	**ug/L**	1.052	358895	0.311
	Cr	52	**99.932**	**ug/L**	0.710	304952	0.264
	Cr	53		**ug/L**		114685	0.047
	Mn	55	**99.957**	**ug/L**	2.058	437050	0.380
	Fe	57	**9993.020**	**ug/L**	1.152	842155	0.730
	Co	59	**99.961**	**ug/L**	2.011	320621	0.279
	Ni	60	**99.974**	**ug/L**	1.510	67607	0.059
	Cu	63		**ug/L**		158008	0.137
	Cu	65	**99.961**	**ug/L**	2.156	76223	0.066
	Zn	66	**99.975**	**ug/L**	0.643	50780	0.274
	Zn	67		**ug/L**		19079	0.067
	Zn	68		**ug/L**		37874	0.202
>	Ge	74		**ug/L**		184089	184088.817
	As	75	**100.013**	**ug/L**	0.931	59856	0.326
	Se	77		**ug/L**		7821	0.027
	Se	82	**100.012**	**ug/L**	2.538	4878	0.027
	Kr	83		**ug/L**		100	0.000
	Sr	88	**99.992**	**ug/L**	0.368	609593	6.465
	Y	89		**ug/L**		95	0.001
	Ag	107	**100.015**	**ug/L**	0.505	247538	2.625
	Cd	111	**100.017**	**ug/L**	0.612	58588	0.621
	Cd	114		**ug/L**		133400	1.415
>	In	115		**ug/L**		94276	94275.678
	Sn	120	**100.012**	**ug/L**	1.343	242576	2.571
	Sb	121	**100.048**	**ug/L**	1.960	222457	2.354
	Sb	123		**ug/L**		172967	1.830
	Ba	135		**ug/L**		58964	0.436
	Ba	137	**99.991**	**ug/L**	0.607	105217	0.778
	Ho	165		**ug/L**		17	0.000
>	Lu	175		**ug/L**		135196	135196.085
	Tl	205	**99.979**	**ug/L**	0.207	447433	3.309
	Pb	208	**99.987**	**ug/L**	1.560	818216	6.050
	Bi	209		**ug/L**		89	0.000
	U	238	**99.958**	**ug/L**	0.574	913016	6.753

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175					
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, January 20, 2010 00:06:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 1.004

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.009**	ug/L	3.970	34987	0.030
	Be	9	**51.228**	ug/L	3.335	14424	0.012
	B	11	**99.649**	ug/L	1.060	25771	0.022
	Na	23	**4603.788**	ug/L	2.504	14276758	12.275
	Mg	24	**4760.424**	ug/L	5.552	10350656	8.903
	Al	27	**4984.975**	ug/L	2.981	14738542	12.680
	P	31	**5067.805**	ug/L	0.477	811574	0.694
	K	39	**4845.597**	ug/L	2.190	16173535	13.438
	Ca	43	**4967.319**	ug/L	2.192	35866	0.031
>	Sc	45		ug/L		1162037	1162037.192
	V	51	**49.335**	ug/L	1.866	180675	0.153
	Cr	52	**50.473**	ug/L	2.242	157049	0.133
	Cr	53		ug/L		98249	0.032
	Mn	55	**51.550**	ug/L	2.692	228769	0.196
	Fe	57	**4999.416**	ug/L	2.173	429268	0.365
	Co	59	**49.437**	ug/L	1.728	160802	0.138
	Ni	60	**50.843**	ug/L	2.013	34896	0.030
	Cu	63		ug/L		80349	0.069
	Cu	65	**50.476**	ug/L	1.136	39042	0.034
	Zn	66	**51.428**	ug/L	0.972	26004	0.141
	Zn	67		ug/L		15035	0.046
	Zn	68		ug/L		19742	0.104
>	Ge	74		ug/L		182296	182295.591
	As	75	**46.128**	ug/L	0.720	27287	0.150
	Se	77		ug/L		6066	0.018
	Se	82	**49.759**	ug/L	1.819	2391	0.013
	Kr	83		ug/L		86	-0.000
	Sr	88	**50.479**	ug/L	0.595	310209	3.264
	Y	89		ug/L		61	0.000
	Ag	107	**50.131**	ug/L	1.108	125060	1.316
	Cd	111	**49.616**	ug/L	1.401	29296	0.308
	Cd	114		ug/L		67298	0.708
>	In	115		ug/L		95021	95021.206
	Sn	120	**50.185**	ug/L	0.236	122754	1.290
	Sb	121	**49.831**	ug/L	2.751	111958	1.172
	Sb	123		ug/L		87383	0.915
	Ba	135		ug/L		29833	0.223
	Ba	137	**50.443**	ug/L	0.843	52520	0.393
	Ho	165		ug/L		22	0.000
>	Lu	175		ug/L		133739	133739.453
	Tl	205	**49.518**	ug/L	0.310	219242	1.639
	Pb	208	**51.308**	ug/L	0.323	415427	3.104
	Bi	209		ug/L		102	0.001
	U	238	**54.231**	ug/L	0.982	489990	3.664

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	104.019				
	Be	9	102.456				
	B	11	99.649				
	Na	23	92.076				
	Mg	24	95.208				
	Al	27	98.712				
	P	31	101.356				
	K	39	96.912				
	Ca	43	99.346				
>	Sc	45		91.8			
	V	51	98.670				
	Cr	52	100.946				
	Cr	53					
	Mn	55	103.100				
	Fe	57	99.988				
	Co	59	98.874				
	Ni	60	101.686				
	Cu	63					
	Cu	65	100.952				
	Zn	66	102.857				
	Zn	67					
	Zn	68					
>	Ge	74		88.7			
	As	75	92.255				
	Se	77					
	Se	82	99.517				
	Kr	83					
	Sr	88	100.958				
	Y	89					
	Ag	107	100.262				
	Cd	111	99.232				
	Cd	114					
>	In	115		90.2			
	Sn	120	100.369				
	Sb	121	99.662				
	Sb	123					
	Ba	135					
	Ba	137	100.886				
	Ho	165					
>	Lu	175		90.2			
	Tl	205	99.036				
	Pb	208	102.615				
	Bi	209					
	U	238	108.461				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, January 20, 2010 00:12:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 2.005

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.020**	**ug/L**	41.145	57	0.000
	Be	9	**-0.020**	**ug/L**	27.375	8	-0.000
	B	11	**1.190**	**ug/L**	50.411	1067	0.000
	Na	23	**-0.019**	**ug/L**	11278.230	12340	-0.000
	Mg	24	**0.144**	**ug/L**	680.405	1334	0.000
	Al	27	**0.920**	**ug/L**	129.749	9670	0.002
	P	31	**-3.985**	**ug/L**	25.620	5294	-0.001
	K	39	**-19.736**	**ug/L**	10.172	536214	-0.055
	Ca	43	**-3.832**	**ug/L**	61.608	351	-0.000
>	Sc	45		**ug/L**		1265842	1265842.298
	V	51	**0.272**	**ug/L**	95.223	3630	0.001
	Cr	52	**-0.022**	**ug/L**	101.169	2116	-0.000
	Cr	53		**ug/L**		65485	-0.001
	Mn	55	**-0.022**	**ug/L**	10.126	769	-0.000
	Fe	57	**-6.176**	**ug/L**	37.260	4607	-0.000
	Co	59	**-0.006**	**ug/L**	98.041	241	-0.000
	Ni	60	**-0.014**	**ug/L**	78.587	119	-0.000
	Cu	63		**ug/L**		338	-0.000
	Cu	65	**-0.013**	**ug/L**	68.692	75	-0.000
	Zn	66	**-0.013**	**ug/L**	71.572	292	-0.000
	Zn	67		**ug/L**		7510	0.002
	Zn	68		**ug/L**		790	0.000
>	Ge	74		**ug/L**		192781	192780.631
	As	75	**0.405**	**ug/L**	60.185	152	0.001
	Se	77		**ug/L**		3078	0.000
	Se	82	**-0.208**	**ug/L**	83.423	-37	-0.000
	Kr	83		**ug/L**		96	0.000
	Sr	88	**-0.001**	**ug/L**	201.620	85	-0.000
	Y	89		**ug/L**		38	-0.000
	Ag	107	**0.003**	**ug/L**	62.274	34	0.000
	Cd	111	**0.003**	**ug/L**	858.120	12	0.000
	Cd	114		**ug/L**		26	0.000
>	In	115		**ug/L**		99943	99943.265
	Sn	120	**0.033**	**ug/L**	17.997	238	0.001
	Sb	121	**0.560**	**ug/L**	21.219	1911	0.013
	Sb	123		**ug/L**		1486	0.010
	Ba	135		**ug/L**		24	0.000
	Ba	137	**0.003**	**ug/L**	141.168	28	0.000
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		140292	140292.087
	Tl	205	**0.062**	**ug/L**	19.527	335	0.002
	Pb	208	**0.003**	**ug/L**	52.352	283	0.000
	Bi	209		**ug/L**		16	-0.000
	U	238	**0.024**	**ug/L**	8.050	267	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.0			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.6			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Wednesday, January 20, 2010 00:15:02

ICPMS#6 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, January 20, 2010 00:18:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 3.006

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**11.050**	**ug/L**	3.696	7574	0.006
	Be	9	**0.555**	**ug/L**	7.858	172	0.000
	B	11	**15.405**	**ug/L**	2.041	4628	0.003
	Na	23	**251.245**	**ug/L**	5.404	802322	0.670
	Mg	24	**15.034**	**ug/L**	14.740	34041	0.028
	Al	27	**32.479**	**ug/L**	3.922	103709	0.083
	P	31	**70.454**	**ug/L**	3.048	16950	0.010
	K	39	**349.618**	**ug/L**	11.952	1709776	0.970
	Ca	43	**218.830**	**ug/L**	4.523	1943	0.001
>	Sc	45		**ug/L**		1179644	1179643.901
	V	51	**11.232**	**ug/L**	1.938	43610	0.035
	Cr	52	**11.132**	**ug/L**	2.038	36750	0.029
	Cr	53		**ug/L**		86019	0.020
	Mn	55	**5.656**	**ug/L**	1.663	26204	0.022
	Fe	57	**113.243**	**ug/L**	2.928	14587	0.008
	Co	59	**1.082**	**ug/L**	2.453	3813	0.003
	Ni	60	**2.130**	**ug/L**	5.272	1598	0.001
	Cu	63		**ug/L**		2223	0.002
	Cu	65	**1.111**	**ug/L**	3.445	951	0.001
	Zn	66	**11.093**	**ug/L**	1.404	5875	0.030
	Zn	67		**ug/L**		11435	0.025
	Zn	68		**ug/L**		4914	0.023
>	Ge	74		**ug/L**		183661	183660.545
	As	75	**5.841**	**ug/L**	3.727	3397	0.019
	Se	77		**ug/L**		4391	0.008
	Se	82	**5.320**	**ug/L**	8.913	236	0.001
	Kr	83		**ug/L**		82	-0.000
	Sr	88	**11.146**	**ug/L**	1.361	68937	0.721
	Y	89		**ug/L**		41	-0.000
	Ag	107	**1.017**	**ug/L**	2.463	2576	0.027
	Cd	111	**1.120**	**ug/L**	2.223	675	0.007
	Cd	114		**ug/L**		1537	0.016
>	In	115		**ug/L**		95540	95539.595
	Sn	120	**5.361**	**ug/L**	1.826	13316	0.138
	Sb	121	**3.313**	**ug/L**	4.501	8013	0.078
	Sb	123		**ug/L**		6226	0.061
	Ba	135		**ug/L**		1294	0.009
	Ba	137	**2.141**	**ug/L**	3.324	2267	0.017
	Ho	165		**ug/L**		13	0.000
>	Lu	175		**ug/L**		134666	134666.468
	Tl	205	**1.097**	**ug/L**	0.737	4938	0.036
	Pb	208	**2.222**	**ug/L**	2.034	18348	0.134
	Bi	209		**ug/L**		22	-0.000
	U	238	**0.247**	**ug/L**	2.621	2290	0.017

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	110.495				
	Be	9	110.970				
	B	11	102.697				
	Na	23	100.498				
	Mg	24	100.224				
	Al	27	108.263				
	P	31	140.908				
	K	39	116.539				
	Ca	43	109.415				
>	Sc	45		93.2			
	V	51	112.317				
	Cr	52	111.322				
	Cr	53					
	Mn	55	113.111				
	Fe	57	113.243				
	Co	59	108.238				
	Ni	60	106.504				
	Cu	63					
	Cu	65	111.116				
	Zn	66	110.935				
	Zn	67					
	Zn	68					
>	Ge	74		89.3			
	As	75	116.815				
	Se	77					
	Se	82	106.397				
	Kr	83					
	Sr	88	111.461				
	Y	89					
	Ag	107	101.746				
	Cd	111	112.045				
	Cd	114					
>	In	115		90.7			
	Sn	120	107.225				
	Sb	121	110.423				
	Sb	123					
	Ba	135					
	Ba	137	107.041				
	Ho	165					
>	Lu	175		90.8			
	Tl	205	109.749				
	Pb	208	111.104				
	Bi	209					
	U	238	123.607				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	P	31	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, January 20, 2010 00:24:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 4.007

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.275**	**ug/L**	20.140	216	0.000
	Be	9	**0.054**	**ug/L**	43.340	27	0.000
	B	11	**1.272**	**ug/L**	23.266	965	0.000
	Na	23	**95194.459**	**ug/L**	0.893	284449874	253.825
	Mg	24	**97068.696**	**ug/L**	5.796	203278269	181.535
	Al	27	**97098.738**	**ug/L**	3.248	276700767	246.992
	P	31	**93834.162**	**ug/L**	2.390	14393975	12.844
	K	39	**98178.039**	**ug/L**	8.025	305455583	272.274
	Ca	43	**89356.949**	**ug/L**	2.153	616353	0.550
>	Sc	45		**ug/L**		1120605	1120604.641
	V	51	**0.016**	**ug/L**	3174.860	2304	0.000
	Cr	52	**2.719**	**ug/L**	3.883	9990	0.007
	Cr	53		**ug/L**		68135	0.008
	Mn	55	**5.610**	**ug/L**	2.908	24693	0.021
	Fe	57	**94095.123**	**ug/L**	1.087	7709440	6.877
	Co	59	**0.332**	**ug/L**	3.957	1271	0.001
	Ni	60	**3.078**	**ug/L**	4.095	2145	0.002
	Cu	63		**ug/L**		3119	0.002
	Cu	65	**3.714**	**ug/L**	4.622	2838	0.002
	Zn	66	**4.146**	**ug/L**	4.450	2211	0.011
	Zn	67		**ug/L**		10063	0.022
	Zn	68		**ug/L**		1203	0.003
>	Ge	74		**ug/L**		170998	170997.716
	As	75	**0.030**	**ug/L**	773.364	-73	0.000
	Se	77		**ug/L**		5245	0.015
	Se	82	**-1.405**	**ug/L**	34.933	-87	-0.000
	Kr	83		**ug/L**		169	0.000
	Sr	88	**1.194**	**ug/L**	1.713	6820	0.077
	Y	89		**ug/L**		252	0.002
	Ag	107	**0.238**	**ug/L**	27.291	568	0.006
	Cd	111	**0.985**	**ug/L**	33.516	545	0.006
	Cd	114		**ug/L**		3726	0.042
>	In	115		**ug/L**		87297	87296.599
	Sn	120	**0.176**	**ug/L**	6.365	529	0.005
	Sb	121	**0.265**	**ug/L**	22.923	1064	0.006
	Sb	123		**ug/L**		807	0.005
	Ba	135		**ug/L**		385	0.003
	Ba	137	**0.647**	**ug/L**	2.596	660	0.005
	Ho	165		**ug/L**		363	0.003
>	Lu	175		**ug/L**		126635	126634.783
	Tl	205	**0.039**	**ug/L**	8.720	206	0.001
	Pb	208	**0.199**	**ug/L**	6.092	1753	0.012
	Bi	209		**ug/L**		278	0.002
	U	238	**0.005**	**ug/L**	21.939	82	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	95.194				
	Mg	24	97.069				
	Al	27	97.099				
	P	31	93.834				
	K	39	98.178				
	Ca	43	89.357				
>	Sc	45		88.5			
	V	51					
	Cr	52	73.489				
	Cr	53					
	Mn	55	96.720				
	Fe	57	94.095				
	Co	59	132.714				
	Ni	60	114.018				
	Cu	63					
	Cu	65	128.055				
	Zn	66	115.180				
	Zn	67					
	Zn	68					
>	Ge	74		83.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	99.499				
	Y	89					
	Ag	107					
	Cd	111	246.240				
	Cd	114					
>	In	115		82.8			
	Sn	120					
	Sb	121	264.879				
	Sb	123					
	Ba	135					
	Ba	137	96.627				
	Ho	165					
>	Lu	175		85.4			
	Tl	205					
	Pb	208	99.468				
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, January 20, 2010 00:30:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 5.008

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.905**	ug/L	3.360	13030	0.012
	Be	9	**20.513**	ug/L	3.388	5619	0.005
	B	11	**20.734**	ug/L	2.609	5733	0.004
	Na	23	**96927.824**	ug/L	1.654	291726499	258.447
	Mg	24	**96433.628**	ug/L	7.368	203448519	180.347
	Al	27	**99908.843**	ug/L	1.129	286878663	254.140
	P	31	**92842.197**	ug/L	1.786	14350040	12.709
	K	39	**96870.182**	ug/L	3.859	303699081	268.647
	Ca	43	**89682.532**	ug/L	1.765	623289	0.552
>	Sc	45		ug/L		1128953	1128953.456
	V	51	**19.786**	ug/L	2.956	71753	0.062
	Cr	52	**21.766**	ug/L	2.187	66902	0.058
	Cr	53		ug/L		73564	0.012
	Mn	55	**25.025**	ug/L	1.573	108294	0.095
	Fe	57	**92751.402**	ug/L	1.936	7655493	6.779
	Co	59	**18.916**	ug/L	2.238	59911	0.053
	Ni	60	**21.356**	ug/L	2.206	14306	0.013
	Cu	63		ug/L		31491	0.028
	Cu	65	**21.994**	ug/L	0.355	16571	0.015
	Zn	66	**23.986**	ug/L	1.951	11517	0.066
	Zn	67		ug/L		11528	0.031
	Zn	68		ug/L		7921	0.042
>	Ge	74		ug/L		170984	170984.220
	As	75	**20.423**	ug/L	2.896	11283	0.067
	Se	77		ug/L		5692	0.018
	Se	82	**20.009**	ug/L	5.549	888	0.005
	Kr	83		ug/L		171	0.001
	Sr	88	**22.429**	ug/L	1.603	126552	1.450
	Y	89		ug/L		233	0.002
	Ag	107	**19.921**	ug/L	1.388	45629	0.523
	Cd	111	**20.741**	ug/L	1.080	11247	0.129
	Cd	114		ug/L		28067	0.322
>	In	115		ug/L		87217	87216.781
	Sn	120	**20.522**	ug/L	0.752	46153	0.528
	Sb	121	**21.254**	ug/L	0.598	44133	0.500
	Sb	123		ug/L		34231	0.388
	Ba	135		ug/L		11287	0.090
	Ba	137	**20.298**	ug/L	0.531	19887	0.158
	Ho	165		ug/L		360	0.003
>	Lu	175		ug/L		125762	125761.729
	Tl	205	**18.820**	ug/L	0.922	78381	0.623
	Pb	208	**19.727**	ug/L	0.392	150338	1.194
	Bi	209		ug/L		363	0.003
	U	238	**21.822**	ug/L	0.555	185432	1.474

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 5

Report Date/Time: Wednesday, January 20, 2010 00:32:43

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	99.527				
	Be	9	102.566				
	B	11	103.672				
	Na	23	96.928				
	Mg	24	96.434				
	Al	27	99.909				
	P	31	92.842				
	K	39	96.870				
	Ca	43	89.683				
>	Sc	45		89.2			
	V	51	98.928				
	Cr	52	91.838				
	Cr	53					
	Mn	55	96.995				
	Fe	57	92.751				
	Co	59	93.413				
	Ni	60	94.080				
	Cu	63					
	Cu	65	96.042				
	Zn	66	101.633				
	Zn	67					
	Zn	68					
>	Ge	74		83.2			
	As	75	102.115				
	Se	77					
	Se	82	100.046				
	Kr	83					
	Sr	88	105.796				
	Y	89					
	Ag	107	99.606				
	Cd	111	101.670				
	Cd	114					
>	In	115		82.8			
	Sn	120	102.612				
	Sb	121	105.744				
	Sb	123					
	Ba	135					
	Ba	137	98.202				
	Ho	165					
>	Lu	175		84.8			
	Tl	205	94.101				
	Pb	208	97.659				
	Bi	209					
	U	238	109.108				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Wednesday, January 20, 2010 00:32:43

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 20, 2010 00:36:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 6.009

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.833**	**ug/L**	4.037	35970	0.031
	Be	9	**52.554**	**ug/L**	1.452	14980	0.013
	B	11	**99.723**	**ug/L**	0.373	26110	0.022
	Na	23	**4949.440**	**ug/L**	6.438	15535180	13.197
	Mg	24	**4790.390**	**ug/L**	0.416	10539527	8.959
	Al	27	**5271.391**	**ug/L**	5.464	15781669	13.409
	P	31	**4980.016**	**ug/L**	1.647	807320	0.682
	K	39	**4721.313**	**ug/L**	4.739	15959461	13.093
	Ca	43	**4850.472**	**ug/L**	1.910	35460	0.030
>	Sc	45		**ug/L**		1176342	1176341.758
	V	51	**48.448**	**ug/L**	1.299	179662	0.151
	Cr	52	**49.999**	**ug/L**	1.118	157523	0.132
	Cr	53		**ug/L**		96427	0.029
	Mn	55	**50.667**	**ug/L**	1.746	227630	0.193
	Fe	57	**4991.501**	**ug/L**	2.656	433817	0.365
	Co	59	**48.983**	**ug/L**	2.945	161256	0.137
	Ni	60	**49.419**	**ug/L**	2.650	34336	0.029
	Cu	63		**ug/L**		78523	0.066
	Cu	65	**48.718**	**ug/L**	2.207	38144	0.032
	Zn	66	**51.803**	**ug/L**	1.219	26210	0.142
	Zn	67		**ug/L**		15471	0.048
	Zn	68		**ug/L**		19724	0.104
>	Ge	74		**ug/L**		182416	182415.750
	As	75	**46.385**	**ug/L**	1.130	27458	0.151
	Se	77		**ug/L**		5919	0.017
	Se	82	**50.448**	**ug/L**	0.982	2427	0.013
	Kr	83		**ug/L**		82	-0.000
	Sr	88	**50.356**	**ug/L**	1.506	306500	3.256
	Y	89		**ug/L**		52	0.000
	Ag	107	**49.887**	**ug/L**	1.054	123272	1.310
	Cd	111	**49.496**	**ug/L**	1.647	28951	0.307
	Cd	114		**ug/L**		66975	0.711
>	In	115		**ug/L**		94120	94119.670
	Sn	120	**49.723**	**ug/L**	1.783	120455	1.278
	Sb	121	**48.689**	**ug/L**	4.993	108336	1.146
	Sb	123		**ug/L**		84531	0.894
	Ba	135		**ug/L**		29765	0.224
	Ba	137	**50.399**	**ug/L**	0.867	52189	0.392
	Ho	165		**ug/L**		20	0.000
>	Lu	175		**ug/L**		133022	133022.489
	Tl	205	**48.165**	**ug/L**	0.613	212111	1.594
	Pb	208	**50.565**	**ug/L**	1.142	407206	3.059
	Bi	209		**ug/L**		98	0.001
	U	238	**51.903**	**ug/L**	1.341	466447	3.506

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	105.666				
	Be	9	105.108				
	B	11	99.723				
	Na	23	98.989				
	Mg	24	95.808				
	Al	27	104.384				
	P	31	99.600				
	K	39	94.426				
	Ca	43	97.009				
>	Sc	45		92.9			
	V	51	96.896				
	Cr	52	99.998				
	Cr	53					
	Mn	55	101.334				
	Fe	57	99.830				
	Co	59	97.965				
	Ni	60	98.839				
	Cu	63					
	Cu	65	97.436				
	Zn	66	103.607				
	Zn	67					
	Zn	68					
>	Ge	74		88.7			
	As	75	92.770				
	Se	77					
	Se	82	100.896				
	Kr	83					
	Sr	88	100.711				
	Y	89					
	Ag	107	99.773				
	Cd	111	98.993				
	Cd	114					
>	In	115		89.3			
	Sn	120	99.446				
	Sb	121	97.377				
	Sb	123					
	Ba	135					
	Ba	137	100.797				
	Ho	165					
>	Lu	175		89.7			
	Tl	205	96.331				
	Pb	208	101.130				
	Bi	209					
	U	238	103.805				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 20, 2010 00:38:36

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 20, 2010 00:42:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 7.010

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.064	ug/L	44.167	89	0.000
	Be	9	-0.005	ug/L	221.638	13	-0.000
	B	11	0.826	ug/L	40.099	973	0.000
	Na	23	2.732	ug/L	32.994	21683	0.007
	Mg	24	1.533	ug/L	39.858	4667	0.003
	Al	27	2.484	ug/L	73.856	14675	0.006
	P	31	-5.084	ug/L	11.456	5132	-0.001
	K	39	-29.450	ug/L	21.675	504422	-0.082
	Ca	43	-3.726	ug/L	73.659	353	-0.000
>	Sc	45		ug/L		1272268	1272268.166
	V	51	0.679	ug/L	5.676	5253	0.002
	Cr	52	-0.083	ug/L	32.603	1921	-0.000
	Cr	53		ug/L		63789	-0.003
	Mn	55	-0.039	ug/L	10.976	693	-0.000
	Fe	57	-5.879	ug/L	30.127	4661	-0.000
	Co	59	-0.015	ug/L	19.209	210	-0.000
	Ni	60	-0.040	ug/L	9.028	100	-0.000
	Cu	63		ug/L		128	-0.000
	Cu	65	-0.003	ug/L	520.383	83	-0.000
	Zn	66	-0.019	ug/L	158.857	289	-0.000
	Zn	67		ug/L		7680	0.003
	Zn	68		ug/L		770	0.000
>	Ge	74		ug/L		192811	192810.801
	As	75	-0.025	ug/L	2158.781	-119	-0.000
	Se	77		ug/L		2940	-0.000
	Se	82	0.083	ug/L	344.173	-22	0.000
	Kr	83		ug/L		78	-0.000
	Sr	88	0.000	ug/L	639.799	93	0.000
	Y	89		ug/L		40	-0.000
	Ag	107	0.003	ug/L	9.278	33	0.000
	Cd	111	-0.005	ug/L	173.599	7	-0.000
	Cd	114		ug/L		23	0.000
>	In	115		ug/L		99340	99339.754
	Sn	120	0.026	ug/L	26.678	219	0.001
	Sb	121	0.351	ug/L	21.992	1413	0.008
	Sb	123		ug/L		1158	0.007
	Ba	135		ug/L		22	0.000
	Ba	137	0.005	ug/L	67.568	30	0.000
	Ho	165		ug/L		18	0.000
>	Lu	175		ug/L		139960	139960.073
	Tl	205	0.069	ug/L	8.512	367	0.002
	Pb	208	0.001	ug/L	57.777	265	0.000
	Bi	209		ug/L		16	-0.000
	U	238	0.020	ug/L	14.596	236	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.5			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		93.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202011785
Sample Date/Time: Wednesday, January 20, 2010 00:47:57
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 940123|2|rmj
Method File: c:\elandata\Method\6020 noirs thtlmozr.mth
Dataset File: C:\elandata\Dataset\100119\1202011785.011

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.027**	**ug/L**	23.929	59	0.000
	Be	9	**-0.006**	**ug/L**	147.424	12	-0.000
	B	11	**0.026**	**ug/L**	440.569	714	0.000
	Na	23	**21.002**	**ug/L**	12.480	79220	0.056
	Mg	24	**1.947**	**ug/L**	47.955	5334	0.004
	Al	27	**4.672**	**ug/L**	28.267	20682	0.012
	P	31	**31.061**	**ug/L**	5.242	10834	0.004
	K	39	**-6.819**	**ug/L**	82.020	554224	-0.019
	Ca	43	**4.619**	**ug/L**	77.214	397	0.000
>	Sc	45		**ug/L**		1206186	1206185.656
	V	51	**0.303**	**ug/L**	311.464	3580	0.001
	Cr	52	**0.314**	**ug/L**	4.074	3087	0.001
	Cr	53		**ug/L**		47785	-0.013
	Mn	55	**0.540**	**ug/L**	3.263	3315	0.002
	Fe	57	**34.223**	**ug/L**	3.103	7953	0.003
	Co	59	**-0.002**	**ug/L**	339.665	244	-0.000
	Ni	60	**0.007**	**ug/L**	134.847	128	0.000
	Cu	63		**ug/L**		425	-0.000
	Cu	65	**0.188**	**ug/L**	1.849	232	0.000
	Zn	66	**2.958**	**ug/L**	1.540	1774	0.008
	Zn	67		**ug/L**		5999	-0.004
	Zn	68		**ug/L**		1757	0.006
>	Ge	74		**ug/L**		183527	183526.606
	As	75	**0.043**	**ug/L**	611.664	-71	0.000
	Se	77		**ug/L**		1997	-0.005
	Se	82	**0.142**	**ug/L**	104.152	-18	0.000
	Kr	83		**ug/L**		68	-0.000
	Sr	88	**0.064**	**ug/L**	5.142	488	0.004
	Y	89		**ug/L**		59	0.000
	Ag	107	**0.008**	**ug/L**	11.846	44	0.000
	Cd	111	**0.029**	**ug/L**	87.002	27	0.000
	Cd	114		**ug/L**		38	0.000
>	In	115		**ug/L**		96713	96713.325
	Sn	120	**0.460**	**ug/L**	3.619	1293	0.012
	Sb	121	**0.051**	**ug/L**	63.272	692	0.001
	Sb	123		**ug/L**		520	0.001
	Ba	135		**ug/L**		136	0.001
	Ba	137	**0.200**	**ug/L**	6.676	236	0.002
	Ho	165		**ug/L**		12	-0.000
>	Lu	175		**ug/L**		136019	136019.163
	Tl	205	**0.065**	**ug/L**	11.424	337	0.002
	Pb	208	**0.071**	**ug/L**	12.849	829	0.004
	Bi	209		**ug/L**		36	0.000
	U	238	**0.012**	**ug/L**	16.385	149	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		95.3			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		89.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.7			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202011786
Sample Date/Time: Wednesday, January 20, 2010 00:53:52
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 940123|40|rm|
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\1202011786.012

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**2.828**	ug/L	7.760	2117	0.002
	Be	9	**21.236**	ug/L	4.179	6538	0.005
	B	11	**38.385**	ug/L	2.938	11297	0.008
	Na	23	**292.989**	ug/L	1.632	1004114	0.781
	Mg	24	**1203.062**	ug/L	0.403	2857005	2.250
	Al	27	**3556.813**	ug/L	3.201	11487869	9.048
	P	31	**220.336**	ug/L	2.737	44271	0.030
	K	39	**1268.245**	ug/L	8.737	5066409	3.517
	Ca	43	**2725.779**	ug/L	2.073	21667	0.017
>	Sc	45		ug/L		1269309	1269308.698
	V	51	**31.045**	ug/L	3.142	125102	0.097
	Cr	52	**64.890**	ug/L	2.150	219895	0.172
	Cr	53		ug/L		82344	0.012
	Mn	55	**151.835**	ug/L	1.869	734278	0.578
	Fe	57	**4760.031**	ug/L	1.504	446692	0.348
	Co	59	**26.063**	ug/L	1.533	92721	0.073
	Ni	60	**38.027**	ug/L	2.009	28539	0.022
	Cu	63		ug/L		82158	0.064
	Cu	65	**47.288**	ug/L	3.208	39947	0.031
	Zn	66	**173.121**	ug/L	2.064	92917	0.475
	Zn	67		ug/L		21118	0.071
	Zn	68		ug/L		67285	0.341
>	Ge	74		ug/L		194991	194991.008
	As	75	**29.702**	ug/L	1.447	18758	0.097
	Se	77		ug/L		5762	0.014
	Se	82	**80.914**	ug/L	2.019	4176	0.022
	Kr	83		ug/L		77	-0.000
	Sr	88	**64.338**	ug/L	0.442	420443	4.160
	Y	89		ug/L		23650	0.234
	Ag	107	**6.464**	ug/L	0.593	17174	0.170
	Cd	111	**17.152**	ug/L	0.152	10778	0.107
	Cd	114		ug/L		24778	0.245
>	In	115		ug/L		101052	101051.856
	Sn	120	**11.894**	ug/L	3.092	31048	0.306
	Sb	121	**9.124**	ug/L	1.918	22289	0.215
	Sb	123		ug/L		17252	0.166
	Ba	135		ug/L		34587	0.244
	Ba	137	**55.766**	ug/L	1.488	61490	0.434
	Ho	165		ug/L		1231	0.009
>	Lu	175		ug/L		141657	141657.358
	Tl	205	**32.391**	ug/L	1.938	151902	1.072
	Pb	208	**24.319**	ug/L	0.940	208690	1.471
	Bi	209		ug/L		1554	0.011
	U	238	**0.564**	ug/L	2.653	5445	0.038

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		100.3			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		95.5			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 20, 2010 00:59:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 6.013

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.281**	ug/L	4.048	34887	0.030
	Be	9	**52.083**	ug/L	2.559	14833	0.013
	B	11	**97.049**	ug/L	4.597	25396	0.021
	Na	23	**4683.342**	ug/L	3.914	14685035	12.488
	Mg	24	**4896.245**	ug/L	5.425	10762980	9.157
	Al	27	**5050.528**	ug/L	6.566	15110510	12.847
	P	31	**4952.106**	ug/L	3.228	802076	0.678
	K	39	**4995.412**	ug/L	2.883	16851435	13.854
	Ca	43	**4886.392**	ug/L	2.417	35692	0.030
>	Sc	45		ug/L		1175529	1175528.967
	V	51	**49.001**	ug/L	2.339	181537	0.152
	Cr	52	**49.618**	ug/L	2.000	156214	0.131
	Cr	53		ug/L		96347	0.029
	Mn	55	**50.374**	ug/L	1.776	226151	0.192
	Fe	57	**4998.649**	ug/L	2.406	434156	0.365
	Co	59	**49.057**	ug/L	2.259	161397	0.137
	Ni	60	**49.840**	ug/L	1.873	34604	0.029
	Cu	63		ug/L		78775	0.067
	Cu	65	**48.646**	ug/L	2.512	38057	0.032
	Zn	66	**52.390**	ug/L	0.179	25964	0.144
	Zn	67		ug/L		15104	0.048
	Zn	68		ug/L		19508	0.105
>	Ge	74		ug/L		178702	178702.214
	As	75	**47.624**	ug/L	0.664	27621	0.155
	Se	77		ug/L		5855	0.017
	Se	82	**51.111**	ug/L	2.568	2409	0.014
	Kr	83		ug/L		75	-0.000
	Sr	88	**51.494**	ug/L	0.433	307235	3.330
	Y	89		ug/L		53	0.000
	Ag	107	**50.224**	ug/L	0.819	121646	1.318
	Cd	111	**50.797**	ug/L	1.877	29120	0.316
	Cd	114		ug/L		66282	0.718
>	In	115		ug/L		92252	92252.481
	Sn	120	**50.613**	ug/L	0.773	120188	1.301
	Sb	121	**49.521**	ug/L	4.273	108008	1.165
	Sb	123		ug/L		84672	0.914
	Ba	135		ug/L		28941	0.221
	Ba	137	**50.197**	ug/L	1.340	51254	0.391
	Ho	165		ug/L		18	0.000
>	Lu	175		ug/L		131172	131172.179
	Tl	205	**48.891**	ug/L	1.040	212295	1.618
	Pb	208	**50.651**	ug/L	0.968	402203	3.065
	Bi	209		ug/L		90	0.001
	U	238	**53.108**	ug/L	0.729	470628	3.588

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7	102.561				
	Be	9	104.165				
	B	11	97.049				
	Na	23	93.667				
	Mg	24	97.925				
	Al	27	100.010				
	P	31	99.042				
	K	39	99.908				
	Ca	43	97.728				
>	Sc	45		92.8			
	V	51	98.001				
	Cr	52	99.236				
	Cr	53					
	Mn	55	100.748				
	Fe	57	99.973				
	Co	59	98.113				
	Ni	60	99.680				
	Cu	63					
	Cu	65	97.292				
	Zn	66	104.780				
	Zn	67					
	Zn	68					
>	Ge	74		86.9			
	As	75	95.247				
	Se	77					
	Se	82	102.222				
	Kr	83					
	Sr	88	102.989				
	Y	89					
	Ag	107	100.449				
	Cd	111	101.593				
	Cd	114					
>	In	115		87.5			
	Sn	120	101.225				
	Sb	121	99.042				
	Sb	123					
	Ba	135					
	Ba	137	100.394				
	Ho	165					
>	Lu	175		88.4			
	Tl	205	97.783				
	Pb	208	101.302				
	Bi	209					
	U	238	106.217				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 20, 2010 01:05:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 7.014

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.037**	**ug/L**	42.505	67	0.000
	Be	9	**-0.010**	**ug/L**	91.389	11	-0.000
	B	11	**0.636**	**ug/L**	54.770	890	0.000
	Na	23	**0.413**	**ug/L**	256.293	13340	0.001
	Mg	24	**-0.132**	**ug/L**	382.085	667	-0.000
	Al	27	**0.381**	**ug/L**	172.453	7669	0.001
	P	31	**-3.949**	**ug/L**	25.730	5148	-0.001
	K	39	**-9.520**	**ug/L**	79.711	555615	-0.026
	Ca	43	**-2.317**	**ug/L**	126.653	352	-0.000
>	Sc	45		**ug/L**		1229227	1229227.025
	V	51	**1.028**	**ug/L**	55.267	6408	0.003
	Cr	52	**0.071**	**ug/L**	40.063	2359	0.000
	Cr	53		**ug/L**		63474	-0.001
	Mn	55	**-0.024**	**ug/L**	2.642	738	-0.000
	Fe	57	**-1.847**	**ug/L**	41.569	4865	-0.000
	Co	59	**-0.010**	**ug/L**	10.907	221	-0.000
	Ni	60	**-0.026**	**ug/L**	36.453	106	-0.000
	Cu	63		**ug/L**		125	-0.000
	Cu	65	**0.001**	**ug/L**	1528.328	84	0.000
	Zn	66	**-0.055**	**ug/L**	48.188	266	-0.000
	Zn	67		**ug/L**		7602	0.003
	Zn	68		**ug/L**		768	0.000
>	Ge	74		**ug/L**		189715	189714.757
	As	75	**0.350**	**ug/L**	89.589	115	0.001
	Se	77		**ug/L**		3012	0.000
	Se	82	**0.385**	**ug/L**	44.513	-6	0.000
	Kr	83		**ug/L**		72	-0.000
	Sr	88	**-0.001**	**ug/L**	25.302	87	-0.000
	Y	89		**ug/L**		35	-0.000
	Ag	107	**0.001**	**ug/L**	142.882	27	0.000
	Cd	111	**0.003**	**ug/L**	688.900	12	0.000
	Cd	114		**ug/L**		25	0.000
>	In	115		**ug/L**		98869	98869.224
	Sn	120	**0.022**	**ug/L**	42.799	209	0.001
	Sb	121	**0.365**	**ug/L**	30.908	1436	0.009
	Sb	123		**ug/L**		1102	0.007
	Ba	135		**ug/L**		18	0.000
	Ba	137	**0.003**	**ug/L**	156.746	28	0.000
	Ho	165		**ug/L**		16	0.000
>	Lu	175		**ug/L**		140433	140433.374
	Tl	205	**0.124**	**ug/L**	9.631	622	0.004
	Pb	208	**0.002**	**ug/L**	77.662	273	0.000
	Bi	209		**ug/L**		17	-0.000
	U	238	**0.019**	**ug/L**	23.059	223	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		97.1			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		94.7			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244228001
Sample Date/Time: Wednesday, January 20, 2010 01:11:37
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940123|2|rmj
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\244228001.015

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**61.884**	**ug/L**	1.591	41334	0.036
	Be	9	**3.304**	**ug/L**	2.137	936	0.001
	B	11	**13.239**	**ug/L**	1.923	3985	0.003
	Na	23	**571.588**	**ug/L**	12.970	1767071	1.524
	Mg	24	**6676.423**	**ug/L**	3.261	14410050	12.486
	Al	27	**41925.067**	**ug/L**	4.521	122997286	106.646
	P	31	**532.274**	**ug/L**	0.986	89492	0.073
	K	39	**6803.535**	**ug/L**	4.821	22307567	18.868
	Ca	43	**6845.762**	**ug/L**	1.176	48937	0.042
>	Sc	45		**ug/L**		1153541	1153541.111
	V	51	**46.843**	**ug/L**	1.521	170405	0.146
	Cr	52	**35.010**	**ug/L**	2.276	108742	0.093
	Cr	53		**ug/L**		55368	-0.005
	Mn	55	**1151.098**	**ug/L**	1.473	5054228	4.381
	Fe	57	**42071.409**	**ug/L**	1.754	3550766	3.075
	Co	59	**9.669**	**ug/L**	1.193	31411	0.027
	Ni	60	**24.951**	**ug/L**	0.876	17061	0.015
	Cu	63		**ug/L**		39298	0.034
	Cu	65	**25.690**	**ug/L**	0.771	19764	0.017
	Zn	66	**172.019**	**ug/L**	1.009	80576	0.472
	Zn	67		**ug/L**		18593	0.072
	Zn	68		**ug/L**		60431	0.351
>	Ge	74		**ug/L**		170177	170177.373
	As	75	**7.411**	**ug/L**	8.029	4019	0.024
	Se	77		**ug/L**		1918	-0.004
	Se	82	**0.703**	**ug/L**	15.438	9	0.000
	Kr	83		**ug/L**		144	0.000
	Sr	88	**54.178**	**ug/L**	0.237	316824	3.503
	Y	89		**ug/L**		478286	5.289
	Ag	107	**0.360**	**ug/L**	3.690	877	0.009
	Cd	111	**1.682**	**ug/L**	7.162	954	0.010
	Cd	114		**ug/L**		703	0.008
>	In	115		**ug/L**		90420	90419.751
	Sn	120	**3.497**	**ug/L**	1.765	8269	0.090
	Sb	121	**0.358**	**ug/L**	5.895	1299	0.008
	Sb	123		**ug/L**		997	0.007
	Ba	135		**ug/L**		184102	1.369
	Ba	137	**312.892**	**ug/L**	0.823	327487	2.435
	Ho	165		**ug/L**		26588	0.198
>	Lu	175		**ug/L**		134495	134495.167
	Tl	205	**0.525**	**ug/L**	2.298	2382	0.017
	Pb	208	**40.782**	**ug/L**	1.617	332110	2.468
	Bi	209		**ug/L**		3605	0.027
	U	238	**80.841**	**ug/L**	1.693	734516	5.461

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		91.1			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		82.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		90.7			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EE	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244228002
Sample Date/Time: Wednesday, January 20, 2010 01:17:32
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940123|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\244228002.016

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**69.108**	**ug/L**	3.794	44867	0.040
	Be	9	**2.772**	**ug/L**	3.173	766	0.001
	B	11	**10.420**	**ug/L**	5.389	3190	0.002
	Na	23	**576.822**	**ug/L**	6.857	1735592	1.538
	Mg	24	**6686.454**	**ug/L**	4.125	14029648	12.505
	Al	27	**35674.607**	**ug/L**	4.682	101778961	90.746
	P	31	**657.900**	**ug/L**	2.454	106319	0.090
	K	39	**6129.303**	**ug/L**	3.798	19609691	16.998
	Ca	43	**6178.594**	**ug/L**	0.991	42992	0.038
>	Sc	45		**ug/L**		1121859	1121859.229
	V	51	**45.754**	**ug/L**	0.944	161949	0.142
	Cr	52	**26.872**	**ug/L**	1.295	81637	0.071
	Cr	53		**ug/L**		46568	-0.011
	Mn	55	**1091.704**	**ug/L**	0.066	4662362	4.155
	Fe	57	**42116.106**	**ug/L**	0.824	3457715	3.078
	Co	59	**8.247**	**ug/L**	0.585	26094	0.023
	Ni	60	**21.315**	**ug/L**	1.370	14191	0.013
	Cu	63		**ug/L**		37129	0.033
	Cu	65	**25.117**	**ug/L**	2.634	18792	0.017
	Zn	66	**175.027**	**ug/L**	0.536	81728	0.480
	Zn	67		**ug/L**		17824	0.068
	Zn	68		**ug/L**		60127	0.350
>	Ge	74		**ug/L**		169641	169640.984
	As	75	**7.928**	**ug/L**	3.549	4290	0.026
	Se	77		**ug/L**		1584	-0.006
	Se	82	**0.499**	**ug/L**	38.845	-0	0.000
	Kr	83		**ug/L**		138	0.000
	Sr	88	**49.441**	**ug/L**	0.613	290818	3.197
	Y	89		**ug/L**		449631	4.943
	Ag	107	**0.338**	**ug/L**	3.942	830	0.009
	Cd	111	**1.575**	**ug/L**	7.109	899	0.010
	Cd	114		**ug/L**		591	0.006
>	In	115		**ug/L**		90949	90949.415
	Sn	120	**3.796**	**ug/L**	1.440	9017	0.098
	Sb	121	**0.213**	**ug/L**	7.530	996	0.005
	Sb	123		**ug/L**		779	0.004
	Ba	135		**ug/L**		136855	1.027
	Ba	137	**230.153**	**ug/L**	0.492	238768	1.791
	Ho	165		**ug/L**		24269	0.182
>	Lu	175		**ug/L**		133305	133305.423
	Tl	205	**0.439**	**ug/L**	1.347	1981	0.015
	Pb	208	**32.384**	**ug/L**	1.514	261428	1.959
	Bi	209		**ug/L**		2773	0.021
	U	238	**22.467**	**ug/L**	1.163	202372	1.518

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.6			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		82.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		86.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		89.9			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEI	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244228003
Sample Date/Time: Wednesday, January 20, 2010 01:23:28
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940123|2|rmj
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\244228003.017

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**31.167**	**ug/L**	5.377	20781	0.018
	Be	9	**3.964**	**ug/L**	3.799	1117	0.001
	B	11	**5.567**	**ug/L**	6.404	2063	0.001
	Na	23	**563.811**	**ug/L**	6.205	1741284	1.503
	Mg	24	**3278.892**	**ug/L**	2.904	7057387	6.132
	Al	27	**27758.298**	**ug/L**	0.912	81250662	70.609
	P	31	**421.565**	**ug/L**	1.823	71842	0.058
	K	39	**3211.452**	**ug/L**	5.559	10799739	8.906
	Ca	43	**3171.813**	**ug/L**	0.633	22806	0.020
>	Sc	45		**ug/L**		1150618	1150618.460
	V	51	**27.387**	**ug/L**	0.803	100358	0.085
	Cr	52	**21.909**	**ug/L**	1.060	68638	0.058
	Cr	53		**ug/L**		43881	-0.015
	Mn	55	**1042.971**	**ug/L**	1.945	4568146	3.970
	Fe	57	**40810.367**	**ug/L**	2.827	3436154	2.983
	Co	59	**4.114**	**ug/L**	1.255	13470	0.012
	Ni	60	**19.031**	**ug/L**	1.707	13008	0.011
	Cu	63		**ug/L**		25284	0.022
	Cu	65	**17.002**	**ug/L**	0.291	13074	0.011
	Zn	66	**173.868**	**ug/L**	0.593	81969	0.477
	Zn	67		**ug/L**		17157	0.063
	Zn	68		**ug/L**		59391	0.343
>	Ge	74		**ug/L**		171280	171280.125
	As	75	**4.508**	**ug/L**	7.250	2426	0.015
	Se	77		**ug/L**		1516	-0.007
	Se	82	**0.702**	**ug/L**	47.998	9	0.000
	Kr	83		**ug/L**		143	0.000
	Sr	88	**21.848**	**ug/L**	1.837	128410	1.413
	Y	89		**ug/L**		675311	7.433
	Ag	107	**0.243**	**ug/L**	8.544	602	0.006
	Cd	111	**1.360**	**ug/L**	2.000	777	0.008
	Cd	114		**ug/L**		312	0.003
>	In	115		**ug/L**		90859	90858.658
	Sn	120	**4.635**	**ug/L**	1.422	10968	0.119
	Sb	121	**0.128**	**ug/L**	19.163	814	0.003
	Sb	123		**ug/L**		648	0.003
	Ba	135		**ug/L**		74350	0.543
	Ba	137	**123.402**	**ug/L**	0.414	131371	0.960
	Ho	165		**ug/L**		34381	0.251
>	Lu	175		**ug/L**		136781	136781.082
	Tl	205	**0.276**	**ug/L**	3.970	1295	0.009
	Pb	208	**9.276**	**ug/L**	1.862	77016	0.561
	Bi	209		**ug/L**		794	0.006
	U	238	**3.291**	**ug/L**	3.052	30450	0.222

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			90.9		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			83.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			86.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			92.2		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEtMn	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244228004
Sample Date/Time: Wednesday, January 20, 2010 01:29:23
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940123|2|rmj
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\244228004.018

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**46.591**	**ug/L**	3.811	30670	0.027
	Be	9	**2.390**	**ug/L**	5.649	671	0.001
	B	11	**8.466**	**ug/L**	1.617	2753	0.002
	Na	23	**490.315**	**ug/L**	4.104	1497687	1.307
	Mg	24	**4995.926**	**ug/L**	3.541	10621992	9.343
	Al	27	**33349.265**	**ug/L**	4.291	96431252	84.831
	P	31	**549.322**	**ug/L**	1.223	90866	0.075
	K	39	**4885.493**	**ug/L**	4.903	15948483	13.549
	Ca	43	**4806.365**	**ug/L**	1.071	33970	0.030
>	Sc	45		**ug/L**		1137016	1137016.236
	V	51	**66.078**	**ug/L**	1.125	236019	0.206
	Cr	52	**26.914**	**ug/L**	1.143	82866	0.071
	Cr	53		**ug/L**		44963	-0.013
	Mn	55	**957.071**	**ug/L**	0.503	4142561	3.643
	Fe	57	**53603.991**	**ug/L**	1.107	4458778	3.918
	Co	59	**9.166**	**ug/L**	0.712	29368	0.026
	Ni	60	**16.850**	**ug/L**	1.058	11395	0.010
	Cu	63		**ug/L**		23310	0.020
	Cu	65	**16.697**	**ug/L**	2.356	12687	0.011
	Zn	66	**222.164**	**ug/L**	0.808	104285	0.610
	Zn	67		**ug/L**		20699	0.084
	Zn	68		**ug/L**		75368	0.438
>	Ge	74		**ug/L**		170667	170667.205
	As	75	**7.990**	**ug/L**	4.209	4352	0.026
	Se	77		**ug/L**		1403	-0.007
	Se	82	**0.624**	**ug/L**	52.987	6	0.000
	Kr	83		**ug/L**		121	0.000
	Sr	88	**41.714**	**ug/L**	1.242	240830	2.697
	Y	89		**ug/L**		332248	3.722
	Ag	107	**0.353**	**ug/L**	7.588	849	0.009
	Cd	111	**1.355**	**ug/L**	2.393	761	0.008
	Cd	114		**ug/L**		277	0.003
>	In	115		**ug/L**		89268	89268.043
	Sn	120	**3.981**	**ug/L**	1.222	9274	0.102
	Sb	121	**0.171**	**ug/L**	8.142	890	0.004
	Sb	123		**ug/L**		657	0.003
	Ba	135		**ug/L**		114376	0.873
	Ba	137	**196.661**	**ug/L**	0.850	200518	1.530
	Ho	165		**ug/L**		18027	0.138
>	Lu	175		**ug/L**		131011	131010.638
	Tl	205	**0.398**	**ug/L**	0.464	1770	0.013
	Pb	208	**28.184**	**ug/L**	0.926	223645	1.705
	Bi	209		**ug/L**		2324	0.018
	U	238	**2.691**	**ug/L**	1.191	23857	0.182

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.8			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		83.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		84.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		88.3			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244228005
Sample Date/Time: Wednesday, January 20, 2010 01:35:19
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940123|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\244228005.019

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**23.856**	**ug/L**	1.985	15249	0.014
	Be	9	**2.139**	**ug/L**	0.809	584	0.001
	B	11	**4.814**	**ug/L**	2.897	1797	0.001
	Na	23	**650.627**	**ug/L**	1.458	1924145	1.735
	Mg	24	**2809.194**	**ug/L**	4.193	5796474	5.254
	Al	27	**22201.608**	**ug/L**	4.095	62274923	56.475
	P	31	**289.626**	**ug/L**	1.374	48927	0.040
	K	39	**2969.075**	**ug/L**	3.525	9605867	8.234
	Ca	43	**2819.825**	**ug/L**	3.539	19460	0.017
>	Sc	45		**ug/L**		1102763	1102762.504
	V	51	**25.501**	**ug/L**	4.025	89673	0.079
	Cr	52	**28.874**	**ug/L**	2.691	86064	0.076
	Cr	53		**ug/L**		45646	-0.012
	Mn	55	**817.386**	**ug/L**	2.904	3430479	3.111
	Fe	57	**35661.696**	**ug/L**	2.702	2877780	2.606
	Co	59	**5.572**	**ug/L**	2.642	17400	0.016
	Ni	60	**23.049**	**ug/L**	3.814	15070	0.014
	Cu	63		**ug/L**		62005	0.056
	Cu	65	**41.725**	**ug/L**	2.108	30635	0.028
	Zn	66	**165.642**	**ug/L**	1.077	77879	0.454
	Zn	67		**ug/L**		16558	0.060
	Zn	68		**ug/L**		57749	0.334
>	Ge	74		**ug/L**		170796	170796.376
	As	75	**9.843**	**ug/L**	2.480	5384	0.032
	Se	77		**ug/L**		1437	-0.007
	Se	82	**0.658**	**ug/L**	46.251	7	0.000
	Kr	83		**ug/L**		120	0.000
	Sr	88	**31.623**	**ug/L**	1.189	185721	2.045
	Y	89		**ug/L**		393660	4.336
	Ag	107	**0.271**	**ug/L**	2.815	668	0.007
	Cd	111	**1.194**	**ug/L**	9.066	682	0.007
	Cd	114		**ug/L**		312	0.003
>	In	115		**ug/L**		90798	90798.050
	Sn	120	**4.313**	**ug/L**	0.943	10207	0.111
	Sb	121	**0.170**	**ug/L**	9.101	903	0.004
	Sb	123		**ug/L**		687	0.003
	Ba	135		**ug/L**		74397	0.561
	Ba	137	**127.268**	**ug/L**	0.932	131326	0.990
	Ho	165		**ug/L**		20420	0.154
>	Lu	175		**ug/L**		132585	132584.736
	Tl	205	**0.251**	**ug/L**	2.958	1147	0.008
	Pb	208	**18.420**	**ug/L**	1.089	148006	1.115
	Bi	209		**ug/L**		1275	0.009
	U	238	**6.147**	**ug/L**	1.273	55102	0.415

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		87.1			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		83.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		86.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		89.4			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244228006
Sample Date/Time: Wednesday, January 20, 2010 01:41:13
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 940123|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\244228006.020

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**49.778**	ug/L	4.586	32498	0.029
	Be	9	**2.274**	ug/L	2.913	634	0.001
	B	11	**8.480**	ug/L	2.565	2733	0.002
	Na	23	**443.463**	ug/L	4.158	1344888	1.182
	Mg	24	**5268.138**	ug/L	8.086	11106140	9.852
	Al	27	**31800.618**	ug/L	4.050	91256051	80.892
	P	31	**391.246**	ug/L	1.379	65730	0.054
	K	39	**5082.940**	ug/L	2.052	16437010	14.096
	Ca	43	**5300.349**	ug/L	1.120	37123	0.033
>	Sc	45		ug/L		1127795	1127795.157
	V	51	**39.171**	ug/L	1.971	139707	0.122
	Cr	52	**26.193**	ug/L	1.668	80047	0.069
	Cr	53		ug/L		43683	-0.014
	Mn	55	**874.973**	ug/L	1.467	3756453	3.330
	Fe	57	**33589.133**	ug/L	1.030	2773003	2.455
	Co	59	**7.914**	ug/L	0.417	25180	0.022
	Ni	60	**18.695**	ug/L	1.455	12528	0.011
	Cu	63		ug/L		38977	0.034
	Cu	65	**25.810**	ug/L	0.954	19412	0.017
	Zn	66	**142.177**	ug/L	1.213	65643	0.390
	Zn	67		ug/L		14872	0.052
	Zn	68		ug/L		49456	0.291
>	Ge	74		ug/L		167619	167618.973
	As	75	**7.238**	ug/L	4.310	3862	0.024
	Se	77		ug/L		1425	-0.007
	Se	82	**0.654**	ug/L	55.812	7	0.000
	Kr	83		ug/L		102	0.000
	Sr	88	**46.937**	ug/L	0.976	269302	3.035
	Y	89		ug/L		317606	3.580
	Ag	107	**0.335**	ug/L	7.656	804	0.009
	Cd	111	**1.514**	ug/L	5.743	843	0.009
	Cd	114		ug/L		576	0.006
>	In	115		ug/L		88711	88711.060
	Sn	120	**2.776**	ug/L	1.276	6468	0.071
	Sb	121	**0.129**	ug/L	12.029	798	0.003
	Sb	123		ug/L		613	0.002
	Ba	135		ug/L		142124	1.104
	Ba	137	**249.704**	ug/L	1.703	250102	1.943
	Ho	165		ug/L		16943	0.132
>	Lu	175		ug/L		128722	128721.688
	Tl	205	**0.396**	ug/L	1.939	1733	0.013
	Pb	208	**39.900**	ug/L	1.653	310945	2.414
	Bi	209		ug/L		3439	0.027
	U	238	**25.293**	ug/L	2.635	219932	1.709

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		89.1			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		81.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		84.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		86.8			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 20, 2010 01:47:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 6.021

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.146**	**ug/L**	2.300	32324	0.030
	Be	9	**51.190**	**ug/L**	0.962	13282	0.012
	B	11	**93.509**	**ug/L**	3.975	22317	0.020
	Na	23	**4654.092**	**ug/L**	8.576	13299995	12.410
	Mg	24	**4448.493**	**ug/L**	2.850	8906193	8.319
	Al	27	**4974.815**	**ug/L**	1.583	13555254	12.655
	P	31	**4997.106**	**ug/L**	0.854	737365	0.684
	K	39	**4984.696**	**ug/L**	3.223	15309007	13.824
	Ca	43	**4819.316**	**ug/L**	1.123	32072	0.030
>	Sc	45		**ug/L**		1070625	1070624.506
	V	51	**49.973**	**ug/L**	0.541	168608	0.155
	Cr	52	**50.683**	**ug/L**	0.620	145313	0.134
	Cr	53		**ug/L**		89101	0.030
	Mn	55	**51.731**	**ug/L**	1.152	211529	0.197
	Fe	57	**5082.180**	**ug/L**	1.551	401994	0.371
	Co	59	**49.790**	**ug/L**	0.841	149218	0.139
	Ni	60	**51.149**	**ug/L**	0.236	32348	0.030
	Cu	63		**ug/L**		73265	0.068
	Cu	65	**50.061**	**ug/L**	2.102	35673	0.033
	Zn	66	**51.633**	**ug/L**	1.230	24188	0.142
	Zn	67		**ug/L**		13626	0.044
	Zn	68		**ug/L**		18173	0.104
>	Ge	74		**ug/L**		168895	168894.899
	As	75	**46.600**	**ug/L**	1.580	25542	0.152
	Se	77		**ug/L**		5481	0.017
	Se	82	**49.698**	**ug/L**	1.990	2213	0.013
	Kr	83		**ug/L**		74	-0.000
	Sr	88	**50.339**	**ug/L**	0.494	286453	3.255
	Y	89		**ug/L**		81	0.000
	Ag	107	**50.391**	**ug/L**	0.482	116409	1.323
	Cd	111	**50.852**	**ug/L**	1.528	27805	0.316
	Cd	114		**ug/L**		63233	0.718
>	In	115		**ug/L**		87984	87984.445
	Sn	120	**49.660**	**ug/L**	0.178	112479	1.277
	Sb	121	**49.564**	**ug/L**	2.504	103126	1.166
	Sb	123		**ug/L**		79894	0.904
	Ba	135		**ug/L**		27488	0.219
	Ba	137	**50.248**	**ug/L**	1.528	49026	0.391
	Ho	165		**ug/L**		18	0.000
>	Lu	175		**ug/L**		125342	125342.445
	Tl	205	**48.989**	**ug/L**	0.953	203274	1.621
	Pb	208	**51.329**	**ug/L**	1.410	389464	3.106
	Bi	209		**ug/L**		93	0.001
	U	238	**53.609**	**ug/L**	1.569	453927	3.622

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	104.292				
	Be	9	102.379				
	B	11	93.509				
	Na	23	93.082				
	Mg	24	88.970				
	Al	27	98.511				
	P	31	99.942				
	K	39	99.694				
	Ca	43	96.386				
>	Sc	45		84.6			
	V	51	99.947				
	Cr	52	101.366				
	Cr	53					
	Mn	55	103.462				
	Fe	57	101.644				
	Co	59	99.580				
	Ni	60	102.298				
	Cu	63					
	Cu	65	100.121				
	Zn	66	103.266				
	Zn	67					
	Zn	68					
>	Ge	74		82.1			
	As	75	93.200				
	Se	77					
	Se	82	99.397				
	Kr	83					
	Sr	88	100.679				
	Y	89					
	Ag	107	100.783				
	Cd	111	101.703				
	Cd	114					
>	In	115		83.5			
	Sn	120	99.321				
	Sb	121	99.127				
	Sb	123					
	Ba	135					
	Ba	137	100.496				
	Ho	165					
>	Lu	175		84.5			
	Tl	205	97.978				
	Pb	208	102.659				
	Bi	209					
	U	238	107.219				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mg	24	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 20, 2010 01:53:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 7.022

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.055**	**ug/L**	20.769	77	0.000
	Be	9	**-0.010**	**ug/L**	41.699	11	-0.000
	B	11	**0.356**	**ug/L**	76.336	787	0.000
	Na	23	**0.030**	**ug/L**	4247.933	11672	0.000
	Mg	24	**-0.123**	**ug/L**	211.111	667	-0.000
	Al	27	**1.460**	**ug/L**	93.238	10671	0.004
	P	31	**-1.769**	**ug/L**	53.789	5323	-0.000
	K	39	**-14.216**	**ug/L**	46.976	520660	-0.039
	Ca	43	**-3.558**	**ug/L**	66.382	331	-0.000
>	Sc	45		**ug/L**		1186348	1186347.717
	V	51	**0.251**	**ug/L**	165.003	3323	0.001
	Cr	52	**0.109**	**ug/L**	30.810	2393	0.000
	Cr	53		**ug/L**		58927	-0.003
	Mn	55	**0.096**	**ug/L**	1.778	1257	0.000
	Fe	57	**0.439**	**ug/L**	233.391	4894	0.000
	Co	59	**-0.014**	**ug/L**	45.187	200	-0.000
	Ni	60	**-0.035**	**ug/L**	47.496	97	-0.000
	Cu	63		**ug/L**		109	-0.000
	Cu	65	**-0.008**	**ug/L**	57.862	73	-0.000
	Zn	66	**-0.024**	**ug/L**	180.122	277	-0.000
	Zn	67		**ug/L**		7124	0.001
	Zn	68		**ug/L**		768	0.000
>	Ge	74		**ug/L**		185943	185943.223
	As	75	**0.147**	**ug/L**	279.706	-9	0.000
	Se	77		**ug/L**		2801	-0.000
	Se	82	**0.432**	**ug/L**	32.602	-4	0.000
	Kr	83		**ug/L**		63	-0.000
	Sr	88	**-0.000**	**ug/L**	13494.960	88	-0.000
	Y	89		**ug/L**		47	-0.000
	Ag	107	**0.005**	**ug/L**	30.967	36	0.000
	Cd	111	**0.008**	**ug/L**	68.448	14	0.000
	Cd	114		**ug/L**		23	0.000
>	In	115		**ug/L**		95826	95826.353
	Sn	120	**0.019**	**ug/L**	42.980	194	0.000
	Sb	121	**0.340**	**ug/L**	23.196	1337	0.008
	Sb	123		**ug/L**		1051	0.006
	Ba	135		**ug/L**		26	0.000
	Ba	137	**0.004**	**ug/L**	171.173	29	0.000
	Ho	165		**ug/L**		9	-0.000
>	Lu	175		**ug/L**		137618	137618.066
	Tl	205	**0.066**	**ug/L**	15.201	349	0.002
	Pb	208	**0.006**	**ug/L**	24.584	300	0.000
	Bi	209		**ug/L**		22	-0.000
	U	238	**0.022**	**ug/L**	17.914	246	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 20, 2010 01:55:34

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.7			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		90.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		92.8			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202011787
Sample Date/Time: Wednesday, January 20, 2010 02:04:54
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 940123|2|rmj
Method File: c:\elandata\Method\6020 nolrs thtlmozr.mth
Dataset File: C:\elandata\Dataset\100119\1202011787.024

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**38.449**	ug/L	3.554	24982	0.022
	Be	9	**2.362**	ug/L	3.490	654	0.001
	B	11	**10.114**	ug/L	2.136	3116	0.002
	Na	23	**562.511**	ug/L	11.558	1692668	1.500
	Mg	24	**5033.453**	ug/L	2.195	10560808	9.413
	Al	27	**34341.237**	ug/L	4.360	97983813	87.355
	P	31	**559.607**	ug/L	1.119	91235	0.077
	K	39	**4703.790**	ug/L	3.237	15169036	13.045
	Ca	43	**5445.896**	ug/L	0.304	37934	0.034
>	Sc	45		ug/L		1121830	1121830.251
	V	51	**48.162**	ug/L	1.201	170355	0.150
	Cr	52	**21.486**	ug/L	1.127	65668	0.057
	Cr	53		ug/L		44129	-0.014
	Mn	55	**820.288**	ug/L	0.750	3503206	3.122
	Fe	57	**26787.287**	ug/L	1.082	2200706	1.958
	Co	59	**9.760**	ug/L	1.299	30837	0.027
	Ni	60	**19.455**	ug/L	1.646	12963	0.011
	Cu	63		ug/L		39337	0.035
	Cu	65	**26.289**	ug/L	1.265	19667	0.017
	Zn	66	**189.525**	ug/L	0.442	89686	0.520
	Zn	67		ug/L		19006	0.074
	Zn	68		ug/L		66561	0.383
>	Ge	74		ug/L		171966	171966.238
	As	75	**7.068**	ug/L	4.794	3868	0.023
	Se	77		ug/L		1558	-0.006
	Se	82	**0.478**	ug/L	55.109	-1	0.000
	Kr	83		ug/L		135	0.000
	Sr	88	**46.566**	ug/L	0.891	271069	3.011
	Y	89		ug/L		609782	6.775
	Ag	107	**0.453**	ug/L	4.133	1093	0.012
	Cd	111	**1.889**	ug/L	2.387	1065	0.012
	Cd	114		ug/L		581	0.006
>	In	115		ug/L		90004	90003.962
	Sn	120	**1.489**	ug/L	0.401	3583	0.038
	Sb	121	**0.117**	ug/L	11.469	782	0.003
	Sb	123		ug/L		578	0.002
	Ba	135		ug/L		151954	1.125
	Ba	137	**252.981**	ug/L	0.388	265871	1.969
	Ho	165		ug/L		30944	0.229
>	Lu	175		ug/L		135044	135043.641
	Tl	205	**0.476**	ug/L	4.957	2176	0.016
	Pb	208	**46.730**	ug/L	1.196	382070	2.827
	Bi	209		ug/L		15713	0.116
	U	238	**3.500**	ug/L	1.644	31973	0.236

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.6			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		83.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.0			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202011788
Sample Date/Time: Wednesday, January 20, 2010 02:10:51
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 940123|2|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\1202011788.025

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**66.519**	**ug/L**	3.780	43220	0.038
	Be	9	**27.775**	**ug/L**	3.345	7561	0.007
	B	11	**56.006**	**ug/L**	1.280	14283	0.012
	Na	23	**1518.653**	**ug/L**	3.388	4558227	4.049
	Mg	24	**5016.299**	**ug/L**	3.896	10534207	9.381
	Al	27	**28982.142**	**ug/L**	5.184	82803222	73.723
	P	31	**1499.814**	**ug/L**	0.590	235794	0.205
	K	39	**4874.405**	**ug/L**	1.883	15712453	13.518
	Ca	43	**5304.422**	**ug/L**	0.677	36985	0.033
>	Sc	45		**ug/L**		1122713	1122713.485
	V	51	**65.157**	**ug/L**	1.956	229826	0.203
	Cr	52	**42.870**	**ug/L**	1.815	129180	0.113
	Cr	53		**ug/L**		50454	-0.008
	Mn	55	**742.126**	**ug/L**	1.016	3171866	2.825
	Fe	57	**21350.206**	**ug/L**	1.542	1756211	1.560
	Co	59	**31.404**	**ug/L**	1.792	98774	0.088
	Ni	60	**39.608**	**ug/L**	1.066	26292	0.023
	Cu	63		**ug/L**		68589	0.061
	Cu	65	**45.212**	**ug/L**	0.868	33797	0.030
	Zn	66	**179.519**	**ug/L**	0.110	83404	0.493
	Zn	67		**ug/L**		17991	0.070
	Zn	68		**ug/L**		61317	0.359
>	Ge	74		**ug/L**		168803	168802.833
	As	75	**45.532**	**ug/L**	0.806	24941	0.148
	Se	77		**ug/L**		1834	-0.005
	Se	82	**10.207**	**ug/L**	6.817	436	0.003
	Kr	83		**ug/L**		123	0.000
	Sr	88	**60.298**	**ug/L**	2.021	350874	3.899
	Y	89		**ug/L**		501775	5.577
	Ag	107	**25.137**	**ug/L**	1.922	59396	0.660
	Cd	111	**6.841**	**ug/L**	2.946	3833	0.043
	Cd	114		**ug/L**		6935	0.077
>	In	115		**ug/L**		89999	89999.106
	Sn	120	**20.764**	**ug/L**	1.504	48178	0.534
	Sb	121	**61.395**	**ug/L**	1.495	130513	1.445
	Sb	123		**ug/L**		101691	1.126
	Ba	135		**ug/L**		126608	0.947
	Ba	137	**213.802**	**ug/L**	2.323	222434	1.664
	Ho	165		**ug/L**		27286	0.204
>	Lu	175		**ug/L**		133720	133720.397
	Tl	205	**47.719**	**ug/L**	0.811	211231	1.579
	Pb	208	**134.863**	**ug/L**	1.059	1091297	8.160
	Bi	209		**ug/L**		92444	0.691
	U	238	**29.132**	**ug/L**	2.021	263151	1.968

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			88.7		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			82.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			85.4		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			90.1		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202011790
Sample Date/Time: Wednesday, January 20, 2010 02:16:46
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 940123|2|rmj
Method File: c:\elandata\Method\6020 nolrs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\1202011790.026

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**67.051**	**ug/L**	3.097	43330	0.039
	Be	9	**25.887**	**ug/L**	1.148	7008	0.006
	B	11	**55.336**	**ug/L**	1.942	14035	0.012
	Na	23	**1496.902**	**ug/L**	1.321	4465202	3.991
	Mg	24	**5358.895**	**ug/L**	8.814	11180624	10.022
	Al	27	**33614.282**	**ug/L**	5.523	95396212	85.505
	P	31	**1491.467**	**ug/L**	1.508	233123	0.204
	K	39	**5556.230**	**ug/L**	7.435	17721452	15.409
	Ca	43	**5488.353**	**ug/L**	1.395	38035	0.034
>	Sc	45		**ug/L**		1116092	1116092.309
	V	51	**69.509**	**ug/L**	1.971	243573	0.216
	Cr	52	**42.911**	**ug/L**	1.288	128543	0.113
	Cr	53		**ug/L**		50494	-0.008
	Mn	55	**1015.024**	**ug/L**	0.605	4312456	3.863
	Fe	57	**23267.775**	**ug/L**	1.313	1902273	1.700
	Co	59	**33.692**	**ug/L**	0.392	105343	0.094
	Ni	60	**41.138**	**ug/L**	1.166	27143	0.024
	Cu	63		**ug/L**		69391	0.062
	Cu	65	**45.984**	**ug/L**	1.801	34166	0.031
	Zn	66	**200.083**	**ug/L**	0.074	93425	0.549
	Zn	67		**ug/L**		19453	0.078
	Zn	68		**ug/L**		69859	0.408
>	Ge	74		**ug/L**		169707	169707.088
	As	75	**45.892**	**ug/L**	0.330	25274	0.149
	Se	77		**ug/L**		1820	-0.005
	Se	82	**9.749**	**ug/L**	6.386	418	0.003
	Kr	83		**ug/L**		126	0.000
	Sr	88	**60.355**	**ug/L**	0.584	350605	3.902
	Y	89		**ug/L**		528689	5.886
	Ag	107	**24.348**	**ug/L**	1.292	57432	0.639
	Cd	111	**6.743**	**ug/L**	2.833	3772	0.042
	Cd	114		**ug/L**		6728	0.075
>	In	115		**ug/L**		89822	89822.330
	Sn	120	**20.606**	**ug/L**	1.739	47726	0.530
	Sb	121	**51.687**	**ug/L**	0.202	109766	1.216
	Sb	123		**ug/L**		85441	0.947
	Ba	135		**ug/L**		144313	1.084
	Ba	137	**243.817**	**ug/L**	0.685	252502	1.897
	Ho	165		**ug/L**		27933	0.210
>	Lu	175		**ug/L**		133076	133076.289
	Tl	205	**46.411**	**ug/L**	1.307	204462	1.536
	Pb	208	**130.243**	**ug/L**	0.321	1048931	7.880
	Bi	209		**ug/L**		14133	0.106
	U	238	**28.470**	**ug/L**	1.025	255985	1.923

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.2			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		82.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		85.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		89.7			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EE	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1202011789
Sample Date/Time: Wednesday, January 20, 2010 02:22:41
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 940123|10|rmj
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\1202011789.027

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.030**	**ug/L**	4.039	6981	0.006
	Be	9	**0.350**	**ug/L**	6.033	115	0.000
	B	11	**1.239**	**ug/L**	22.842	1022	0.000
	Na	23	**89.081**	**ug/L**	8.668	295706	0.238
	Mg	24	**821.527**	**ug/L**	1.832	1839238	1.536
	Al	27	**4504.836**	**ug/L**	2.981	13719675	11.459
	P	31	**73.233**	**ug/L**	1.947	17654	0.010
	K	39	**743.128**	**ug/L**	3.100	3038198	2.061
	Ca	43	**731.512**	**ug/L**	2.420	5747	0.005
>	Sc	45		**ug/L**		1196727	1196726.686
	V	51	**6.832**	**ug/L**	12.396	27821	0.021
	Cr	52	**2.936**	**ug/L**	4.139	11358	0.008
	Cr	53		**ug/L**		43308	-0.017
	Mn	55	**128.117**	**ug/L**	1.449	584331	0.488
	Fe	57	**4098.629**	**ug/L**	1.210	363334	0.300
	Co	59	**1.391**	**ug/L**	1.379	4901	0.004
	Ni	60	**3.043**	**ug/L**	3.197	2266	0.002
	Cu	63		**ug/L**		5678	0.004
	Cu	65	**3.513**	**ug/L**	4.241	2872	0.002
	Zn	66	**26.636**	**ug/L**	2.431	13704	0.073
	Zn	67		**ug/L**		7121	0.002
	Zn	68		**ug/L**		10629	0.054
>	Ge	74		**ug/L**		183667	183666.758
	As	75	**1.226**	**ug/L**	5.876	637	0.004
	Se	77		**ug/L**		1826	-0.006
	Se	82	**0.537**	**ug/L**	39.408	2	0.000
	Kr	83		**ug/L**		65	-0.000
	Sr	88	**5.987**	**ug/L**	1.674	37840	0.387
	Y	89		**ug/L**		87746	0.899
	Ag	107	**0.044**	**ug/L**	3.589	138	0.001
	Cd	111	**0.206**	**ug/L**	2.860	135	0.001
	Cd	114		**ug/L**		101	0.001
>	In	115		**ug/L**		97532	97532.476
	Sn	120	**0.274**	**ug/L**	5.086	836	0.007
	Sb	121	**-0.051**	**ug/L**	40.979	463	-0.001
	Sb	123		**ug/L**		369	-0.001
	Ba	135		**ug/L**		20819	0.150
	Ba	137	**33.849**	**ug/L**	1.502	36563	0.263
	Ho	165		**ug/L**		4629	0.033
>	Lu	175		**ug/L**		138727	138727.071
	Tl	205	**0.186**	**ug/L**	5.911	901	0.006
	Pb	208	**6.726**	**ug/L**	1.181	56708	0.407
	Bi	209		**ug/L**		1927	0.014
	U	238	**0.564**	**ug/L**	2.531	5328	0.038

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			94.5		
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			89.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			92.5		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175			93.5		
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, January 20, 2010 02:46:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 6.031

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**52.446**	**ug/L**	1.580	33213	0.030
	Be	9	**49.539**	**ug/L**	1.458	13132	0.012
	B	11	**90.585**	**ug/L**	0.867	22109	0.020
	Na	23	**4454.224**	**ug/L**	3.112	12997664	11.877
	Mg	24	**4637.911**	**ug/L**	5.417	9491427	8.674
	Al	27	**4746.821**	**ug/L**	2.957	13215631	12.075
	P	31	**4936.738**	**ug/L**	1.532	744224	0.676
	K	39	**4649.800**	**ug/L**	1.812	14625618	12.895
	Ca	43	**4715.697**	**ug/L**	1.916	32065	0.029
>	Sc	45		**ug/L**		1093771	1093771.084
	V	51	**48.976**	**ug/L**	0.710	168865	0.152
	Cr	52	**50.088**	**ug/L**	0.725	146731	0.132
	Cr	53		**ug/L**		88056	0.028
	Mn	55	**50.943**	**ug/L**	1.001	212821	0.194
	Fe	57	**4981.797**	**ug/L**	0.645	402682	0.364
	Co	59	**49.089**	**ug/L**	0.814	150308	0.137
	Ni	60	**50.137**	**ug/L**	1.833	32398	0.030
	Cu	63		**ug/L**		73542	0.067
	Cu	65	**49.294**	**ug/L**	1.547	35888	0.033
	Zn	66	**50.679**	**ug/L**	1.543	24052	0.139
	Zn	67		**ug/L**		13690	0.043
	Zn	68		**ug/L**		18443	0.104
>	Ge	74		**ug/L**		171071	171070.554
	As	75	**46.895**	**ug/L**	1.546	26036	0.153
	Se	77		**ug/L**		5460	0.016
	Se	82	**50.389**	**ug/L**	2.755	2273	0.013
	Kr	83		**ug/L**		62	-0.000
	Sr	88	**49.414**	**ug/L**	1.716	284699	3.195
	Y	89		**ug/L**		71	0.000
	Ag	107	**49.461**	**ug/L**	1.393	115687	1.298
	Cd	111	**49.215**	**ug/L**	0.457	27246	0.306
	Cd	114		**ug/L**		62873	0.706
>	In	115		**ug/L**		89084	89084.412
	Sn	120	**49.352**	**ug/L**	0.257	113176	1.269
	Sb	121	**48.670**	**ug/L**	2.743	102539	1.145
	Sb	123		**ug/L**		80564	0.900
	Ba	135		**ug/L**		27734	0.218
	Ba	137	**49.015**	**ug/L**	1.514	48553	0.381
	Ho	165		**ug/L**		22	0.000
>	Lu	175		**ug/L**		127236	127236.379
	Tl	205	**49.104**	**ug/L**	0.575	206834	1.625
	Pb	208	**50.129**	**ug/L**	0.803	386143	3.033
	Bi	209		**ug/L**		125	0.001
	U	238	**52.901**	**ug/L**	1.209	454743	3.574

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7	104.892				
	Be	9	99.079				
	B	11	90.585				
	Na	23	89.084				
	Mg	24	92.758				
	Al	27	93.996				
	P	31	98.735				
	K	39	92.996				
	Ca	43	94.314				
>	Sc	45		86.4			
	V	51	97.952				
	Cr	52	100.176				
	Cr	53					
	Mn	55	101.886				
	Fe	57	99.636				
	Co	59	98.177				
	Ni	60	100.273				
	Cu	63					
	Cu	65	98.587				
	Zn	66	101.359				
	Zn	67					
	Zn	68					
>	Ge	74		83.2			
	As	75	93.791				
	Se	77					
	Se	82	100.778				
	Kr	83					
	Sr	88	98.828				
	Y	89					
	Ag	107	98.922				
	Cd	111	98.430				
	Cd	114					
>	In	115		84.5			
	Sn	120	98.703				
	Sb	121	97.340				
	Sb	123					
	Ba	135					
	Ba	137	98.029				
	Ho	165					
>	Lu	175		85.8			
	Tl	205	98.207				
	Pb	208	100.258				
	Bi	209					
	U	238	105.801				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Na	23	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, January 20, 2010 02:52:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020 noirs thtimozr.mth
Dataset File: C:\elandata\Dataset\100119\QC Std 7.032

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.055**	**ug/L**	41.983	77	0.000
	Be	9	**-0.010**	**ug/L**	236.473	11	-0.000
	B	11	**0.100**	**ug/L**	164.974	722	0.000
	Na	23	**1.503**	**ug/L**	63.138	16343	0.004
	Mg	24	**0.177**	**ug/L**	293.283	1333	0.000
	Al	27	**-0.969**	**ug/L**	70.819	3334	-0.002
	P	31	**-3.286**	**ug/L**	22.736	5083	-0.000
	K	39	**-5.731**	**ug/L**	38.506	549364	-0.016
	Ca	43	**-8.361**	**ug/L**	33.036	296	-0.000
>	Sc	45		**ug/L**		1187926	1187925.533
	V	51	**0.388**	**ug/L**	227.108	3830	0.001
	Cr	52	**0.132**	**ug/L**	29.505	2470	0.000
	Cr	53		**ug/L**		54550	-0.007
	Mn	55	**0.122**	**ug/L**	3.580	1376	0.000
	Fe	57	**-2.249**	**ug/L**	77.364	4667	-0.000
	Co	59	**-0.016**	**ug/L**	7.630	194	-0.000
	Ni	60	**-0.044**	**ug/L**	13.326	90	-0.000
	Cu	63		**ug/L**		154	-0.000
	Cu	65	**0.025**	**ug/L**	47.729	100	0.000
	Zn	66	**0.107**	**ug/L**	47.674	343	0.000
	Zn	67		**ug/L**		6709	-0.001
	Zn	68		**ug/L**		745	0.000
>	Ge	74		**ug/L**		185540	185539.705
	As	75	**0.206**	**ug/L**	126.026	26	0.001
	Se	77		**ug/L**		2547	-0.002
	Se	82	**0.321**	**ug/L**	51.951	-9	0.000
	Kr	83		**ug/L**		71	-0.000
	Sr	88	**0.000**	**ug/L**	416.130	92	0.000
	Y	89		**ug/L**		50	0.000
	Ag	107	**0.000**	**ug/L**	629.451	26	0.000
	Cd	111	**0.006**	**ug/L**	184.704	14	0.000
	Cd	114		**ug/L**		24	0.000
>	In	115		**ug/L**		96640	96639.747
	Sn	120	**0.021**	**ug/L**	40.280	200	0.001
	Sb	121	**0.308**	**ug/L**	23.379	1274	0.007
	Sb	123		**ug/L**		1042	0.006
	Ba	135		**ug/L**		29	0.000
	Ba	137	**0.015**	**ug/L**	31.111	40	0.000
	Ho	165		**ug/L**		14	0.000
>	Lu	175		**ug/L**		135642	135642.296
	Tl	205	**0.090**	**ug/L**	21.520	450	0.003
	Pb	208	**0.008**	**ug/L**	24.724	312	0.000
	Bi	209		**ug/L**		24	0.000
	U	238	**0.020**	**ug/L**	25.886	226	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		93.8			
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		90.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Lu	175		91.4			
	Tl	205					
	Pb	208					
	Bi	209					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 20, 2010 02:54:51

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\012810S1.SIF
Batch ID:
Results Data Set: 012810S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: SOIL **Method Last Saved: 1/4/2010 13:53:20**
Method Description: 7471A, ILM04 ANALYST JXL

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 1/28/2010 08:53:52**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	-0.0001	0.0002	08:54:44	Yes
2		[0.00]	0.0001	-0.0003	0.0001	08:55:13	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	29.97				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 1/28/2010 08:55:32**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0020	0.0081	0.0022	08:56:23	Yes
2		[0.2]	0.0021	0.0093	0.0023	08:56:53	Yes
Mean:		[0.2]	0.0021				
SD:		0.0	0.0001				
%RSD:		0.0	2.74				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01038 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 1/28/2010 08:57:12**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0054	0.0215	0.0055	08:58:03	Yes
2		[0.5]	0.0054	0.0220	0.0055	08:58:33	Yes
Mean:		[0.5]	0.0054				
SD:		0.0	0.0000				
%RSD:		0.0	0.01				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999902 Slope: 0.01072 Intercept: -0.00003

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 1/28/2010 08:58:52**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0219	0.0915	0.0221	08:59:44	Yes
2		[2.0]	0.0218	0.0916	0.0219	09:00:14	Yes
Mean:		[2.0]	0.0218				
SD:		0.0	0.0001				
%RSD:		0.0	0.40				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999983 Slope: 0.01095 Intercept: -0.00007

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 1/28/2010 09:00:33**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0547	0.2297	0.0548	09:01:25	Yes
2		[5.0]	0.0544	0.2281	0.0545	09:01:55	Yes
Mean:		[5.0]	0.0545				
SD:		0.0	0.0002				
%RSD:		0.0	0.43				

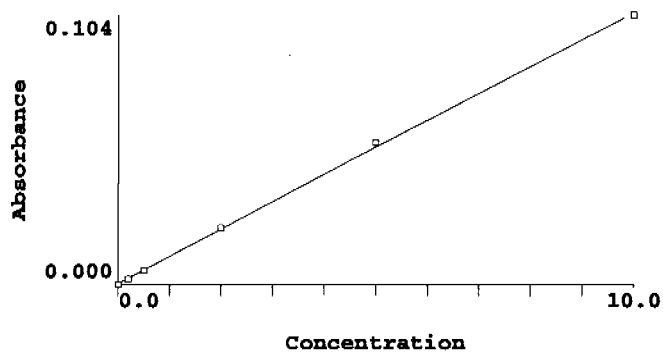
Standard number 4 applied. [5.0]
Correlation Coef.: 0.999997 Slope: 0.01092 Intercept: -0.00006

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 1/28/2010 09:02:15**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1045	0.4437	0.1046	09:03:05	Yes
2		[10.0]	0.1043	0.4410	0.1045	09:03:35	Yes
Mean:		[10.0]	0.1044				
SD:		0.0	0.0001				
%RSD:		0.0	0.12				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999747 Slope: 0.01049 Intercept: 0.00043



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.041	0.00	30.0
S0.2	0.0021	0.2	0.157	0.00	2.7
S0.5	0.0054	0.5	0.469	0.00	0.0
S2.0	0.0218	2.0	2.042	0.00	0.4

S5.0	0.0545	5.0	5.159	0.00	0.4
S10.0	0.1044	10.0	9.914	0.00	0.1

Correlation Coef.: 0.999747 Slope: 0.01049 Intercept: 0.00043

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 1/28/2010 09:03:54**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.094	5.094	0.0539	0.2278	0.0540	09:04:46	Yes
2	5.099	5.099	0.0539	0.2267	0.0540	09:05:15	Yes
Mean:	5.097	5.097	0.0539				
SD:	0.003	0.003	0.0000				
%RSD:	0.058	0.058	0.06				

QC value within limits for Hg 253.7 Recovery = 101.93%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 1/28/2010 09:05:35**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	-0.0001	-0.0016	0.0000	09:06:27	Yes
2	-0.048	-0.048	-0.0001	-0.0008	0.0001	09:06:56	Yes
Mean:	-0.050	-0.050	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.738	6.738	39.21				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 1/28/2010 09:07:16**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.164	0.164	0.0022	0.0088	0.0023	09:08:08	Yes
2	0.155	0.155	0.0021	0.0078	0.0022	09:08:38	Yes
Mean:	0.159	0.159	0.0021				
SD:	0.007	0.007	0.0001				
%RSD:	4.126	4.126	3.27				

QC value within limits for Hg 253.7 Recovery = 79.64%
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 09:08:58**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.072	5.072	0.0536	0.2278	0.0538	09:09:48	Yes
2	5.052	5.052	0.0534	0.2256	0.0536	09:10:18	Yes
Mean:	5.062	5.062	0.0535				
SD:	0.014	0.014	0.0002				
%RSD:	0.286	0.286	0.28				

QC value within limits for Hg 253.7 Recovery = 101.24%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 1/28/2010 09:10:37
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	-0.0001	-0.0011	0.0001	09:11:27	Yes
2	-0.049	-0.049	-0.0001	-0.0007	0.0001	09:11:57	Yes
Mean:	-0.050	-0.050	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.809	0.809	4.85				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1202019704|943287|1
Analyst: JXL
Autosampler Location: 12
Date Collected: 1/28/2010 09:12:17
Data Type: Original

Replicate Data: 1202019704|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0001	-0.0009	0.0001	09:13:08	Yes
2	-0.051	-0.051	-0.0001	-0.0010	0.0001	09:13:38	Yes
Mean:	-0.049	-0.049	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	3.339	3.339	20.56				

Sequence No.: 13
Sample ID: 1202019705|943287|10
Analyst: JXL
Autosampler Location: 13
Date Collected: 1/28/2010 09:13:58
Data Type: Original

Replicate Data: 1202019705|943287|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.720	3.720	0.0394	0.1674	0.0396	09:14:50	Yes
2	3.699	3.699	0.0392	0.1659	0.0394	09:15:19	Yes
Mean:	3.710	3.710	0.0393				
SD:	0.015	0.015	0.0002				
%RSD:	0.410	0.410	0.41				

Sequence No.: 14
Sample ID: 244227001|943287|1
Analyst: JXL
Autosampler Location: 14
Date Collected: 1/28/2010 09:15:40
Data Type: Original

Replicate Data: 244227001|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0007	0.0017	0.0009	09:16:30	Yes
2	0.028	0.028	0.0007	0.0022	0.0009	09:17:00	Yes
Mean:	0.028	0.028	0.0007				
SD:	0.001	0.001	0.0000				
%RSD:	4.386	4.386	1.75				

Sequence No.: 15
Sample ID: 1202019706|943287|1
Analyst: JXL
Autosampler Location: 15
Date Collected: 1/28/2010 09:17:19
Data Type: Original

Replicate Data: 1202019706|943287|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Replicate Data: 244227003|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.137	0.137	0.0019	0.0087	0.0020	09:26:27	Yes
2	0.136	0.136	0.0019	0.0083	0.0020	09:26:57	Yes
Mean:	0.137	0.137	0.0019				
SD:	0.001	0.001	0.0000				
%RSD:	0.806	0.806	0.62				

Sequence No.: 21 Autosampler Location: 21
Sample ID: 244227004|943287|1 Date Collected: 1/28/2010 09:27:16
Analyst: JXL Data Type: Original

Replicate Data: 244227004|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.219	0.219	0.0027	0.0119	0.0029	09:28:07	Yes
2	0.213	0.213	0.0027	0.0110	0.0028	09:28:37	Yes
Mean:	0.216	0.216	0.0027				
SD:	0.004	0.004	0.0000				
%RSD:	1.899	1.899	1.59				

Sequence No.: 22 Autosampler Location: 7
Sample ID: CCV Date Collected: 1/28/2010 09:28:56
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.005	5.005	0.0529	0.2242	0.0531	09:29:46	Yes
2	5.020	5.020	0.0531	0.2247	0.0532	09:30:16	Yes
Mean:	5.012	5.012	0.0530				
SD:	0.011	0.011	0.0001				
%RSD:	0.221	0.221	0.22				

QC value within limits for Hg 253.7 Recovery = 100.25%
All analyte(s) passed QC.

Sequence No.: 23 Autosampler Location: 8
Sample ID: CCB Date Collected: 1/28/2010 09:30:35
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.049	-0.049	-0.0001	-0.0006	0.0001	09:31:26	Yes
2	-0.043	-0.043	-0.0000	0.0003	0.0001	09:31:56	Yes
Mean:	-0.046	-0.046	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	8.634	8.634	90.40				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24 Autosampler Location: 22
Sample ID: 244227005|943287|1 Date Collected: 1/28/2010 09:32:15
Analyst: JXL Data Type: Original

Replicate Data: 244227005|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.268	0.268	0.0032	0.0141	0.0034	09:33:06	Yes
2	0.265	0.265	0.0032	0.0139	0.0034	09:33:36	Yes

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.165	0.165	0.0022	0.0111	0.0023	09:41:33	Yes
2	0.166	0.166	0.0022	0.0112	0.0023	09:42:03	Yes
Mean:	0.165	0.165	0.0022				
SD:	0.000	0.000	0.0000				
%RSD:	0.181	0.181	0.14				

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: 244227011|943287|1 **Date Collected: 1/28/2010 09:42:22**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227011|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.011	0.011	0.0006	0.0024	0.0007	09:43:13	Yes
2	0.012	0.012	0.0006	0.0026	0.0007	09:43:43	Yes
Mean:	0.011	0.011	0.0006				
SD:	0.000	0.000	0.0000				
%RSD:	2.628	2.628	0.57				

Sequence No.: 31 **Autosampler Location: 29**
Sample ID: 244227012|943287|1 **Date Collected: 1/28/2010 09:44:02**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227012|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.140	0.140	0.0019	0.0083	0.0021	09:44:53	Yes
2	0.132	0.132	0.0018	0.0079	0.0020	09:45:23	Yes
Mean:	0.136	0.136	0.0019				
SD:	0.005	0.005	0.0001				
%RSD:	3.982	3.982	3.05				

Sequence No.: 32 **Autosampler Location: 30**
Sample ID: 244227013|943287|1 **Date Collected: 1/28/2010 09:45:42**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227013|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.361	0.361	0.0042	0.0181	0.0044	09:46:32	Yes
2	0.362	0.362	0.0042	0.0184	0.0044	09:47:02	Yes
Mean:	0.361	0.361	0.0042				
SD:	0.001	0.001	0.0000				
%RSD:	0.169	0.169	0.15				

Sequence No.: 33 **Autosampler Location: 31**
Sample ID: 244227014|943287|1 **Date Collected: 1/28/2010 09:47:21**
Analyst: JXL **Data Type: Original**

Replicate Data: 244227014|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.181	0.181	0.0023	0.0102	0.0025	09:48:12	Yes
2	0.180	0.180	0.0023	0.0101	0.0025	09:48:42	Yes
Mean:	0.181	0.181	0.0023				
SD:	0.001	0.001	0.0000				
%RSD:	0.497	0.497	0.40				

Sequence No.: 34 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 09:49:01**

Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.102	5.102	0.0539	0.2295	0.0541	09:49:52	Yes
2	5.115	5.115	0.0541	0.2304	0.0542	09:50:22	Yes
Mean:	5.109	5.109	0.0540				
SD:	0.009	0.009	0.0001				
%RSD:	0.184	0.184	0.18				

QC value within limits for Hg 253.7 Recovery = 102.17%
All analyte(s) passed QC.

Sequence No.: 35 Autosampler Location: 8
Sample ID: CCB Date Collected: 1/28/2010 09:50:41
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	0.0000	0.0015	0.0002	09:51:31	Yes
2	-0.030	-0.030	0.0001	0.0023	0.0003	09:52:01	Yes
Mean:	-0.034	-0.034	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	16.35	16.35	78.42				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 Autosampler Location: 32
Sample ID: 244227015|943287|1 Date Collected: 1/28/2010 09:52:21
Analyst: JXL Data Type: Original

Replicate Data: 244227015|943287|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.096	0.096	0.0014	0.0077	0.0016	09:53:11	Yes
2	0.096	0.096	0.0014	0.0080	0.0016	09:53:41	Yes
Mean:	0.096	0.096	0.0014				
SD:	0.000	0.000	0.0000				
%RSD:	0.188	0.188	0.13				

Sequence No.: 37 Autosampler Location: 33
Sample ID: 1202019684|943278|1 Date Collected: 1/28/2010 09:54:01
Analyst: JXL Data Type: Original

Replicate Data: 1202019684|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0002	0.0033	0.0004	09:54:51	Yes
2	-0.020	-0.020	0.0002	0.0032	0.0004	09:55:21	Yes
Mean:	-0.021	-0.021	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	2.351	2.351	2.37				

Sequence No.: 38 Autosampler Location: 34
Sample ID: 1202019685|943278|10 Date Collected: 1/28/2010 09:55:41
Analyst: JXL Data Type: Original

Replicate Data: 1202019685|943278|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.800	3.800	0.0403	0.1714	0.0404	09:56:32	Yes

2	3.768	3.768	0.0399	0.1697	0.0401	09:57:02	Yes
Mean:	3.784	3.784	0.0401				
SD:	0.023	0.023	0.0002				
%RSD:	0.595	0.595	0.59				

Sequence No.: 39 **Autosampler Location: 35**
Sample ID: 244228001|943278|1 **Date Collected: 1/28/2010 09:57:21**
Analyst: JXL **Data Type: Original**

Replicate Data: 244228001|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.140	0.140	0.0019	0.0086	0.0020	09:58:13	Yes
2	0.139	0.139	0.0019	0.0083	0.0020	09:58:42	Yes
Mean:	0.139	0.139	0.0019				
SD:	0.000	0.000	0.0000				
%RSD:	0.164	0.164	0.13				

Sequence No.: 40 **Autosampler Location: 36**
Sample ID: 244228002|943278|1 **Date Collected: 1/28/2010 09:59:02**
Analyst: JXL **Data Type: Original**

Replicate Data: 244228002|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.143	0.143	0.0019	0.0087	0.0021	09:59:54	Yes
2	0.142	0.142	0.0019	0.0086	0.0021	10:00:24	Yes
Mean:	0.142	0.142	0.0019				
SD:	0.001	0.001	0.0000				
%RSD:	0.714	0.714	0.55				

Sequence No.: 41 **Autosampler Location: 37**
Sample ID: 244228003|943278|1 **Date Collected: 1/28/2010 10:00:44**
Analyst: JXL **Data Type: Original**

Replicate Data: 244228003|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.206	0.206	0.0026	0.0117	0.0027	10:01:35	Yes
2	0.206	0.206	0.0026	0.0117	0.0027	10:02:05	Yes
Mean:	0.206	0.206	0.0026				
SD:	0.000	0.000	0.0000				
%RSD:	0.037	0.037	0.03				

Sequence No.: 42 **Autosampler Location: 38**
Sample ID: 244228004|943278|1 **Date Collected: 1/28/2010 10:02:26**
Analyst: JXL **Data Type: Original**

Replicate Data: 244228004|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.116	0.116	0.0016	0.0081	0.0018	10:03:16	Yes
2	0.116	0.116	0.0017	0.0082	0.0018	10:03:46	Yes
Mean:	0.116	0.116	0.0017				
SD:	0.000	0.000	0.0000				
%RSD:	0.236	0.236	0.17				

Sequence No.: 43 **Autosampler Location: 39**
Sample ID: 244228005|943278|1 **Date Collected: 1/28/2010 10:04:06**
Analyst: JXL **Data Type: Original**

Replicate Data: 244228005|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.124	0.124	0.0017	0.0081	0.0019	10:04:57	Yes
2	0.126	0.126	0.0018	0.0084	0.0019	10:05:27	Yes
Mean:	0.125	0.125	0.0017				
SD:	0.001	0.001	0.0000				
%RSD:	0.819	0.819	0.62				

==========

Sequence No.: 44 Autosampler Location: 40
Sample ID: 244228006|943278|1 Date Collected: 1/28/2010 10:05:46
Analyst: JXL Data Type: Original

Replicate Data: 244228006|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.153	0.153	0.0020	0.0094	0.0022	10:06:37	Yes
2	0.153	0.153	0.0020	0.0095	0.0022	10:07:07	Yes
Mean:	0.153	0.153	0.0020				
SD:	0.000	0.000	0.0000				
%RSD:	0.115	0.115	0.09				

==========

Sequence No.: 45 Autosampler Location: 41
Sample ID: 244888001|943278|1 Date Collected: 1/28/2010 10:07:26
Analyst: JXL Data Type: Original

Replicate Data: 244888001|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.151	0.151	0.0020	0.0092	0.0022	10:08:17	Yes
2	0.156	0.156	0.0021	0.0101	0.0022	10:08:47	Yes
Mean:	0.154	0.154	0.0020				
SD:	0.003	0.003	0.0000				
%RSD:	2.238	2.238	1.76				

==========

Sequence No.: 46 Autosampler Location: 7
Sample ID: CCV Date Collected: 1/28/2010 10:09:07
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.176	5.176	0.0547	0.2332	0.0549	10:09:57	Yes
2	5.172	5.172	0.0547	0.2332	0.0548	10:10:27	Yes
Mean:	5.174	5.174	0.0547				
SD:	0.003	0.003	0.0000				
%RSD:	0.049	0.049	0.05				

QC value within limits for Hg 253.7 Recovery = 103.47%
All analyte(s) passed QC.

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Sequence No.: 47 Autosampler Location: 8
Sample ID: CCB Date Collected: 1/28/2010 10:10:46
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	-0.0000	0.0005	0.0001	10:11:36	Yes
2	-0.040	-0.040	0.0000	0.0012	0.0002	10:12:06	Yes
Mean:	-0.042	-0.042	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	7.815	7.815	354.02				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 244920001|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	11.68	11.68	0.1229	0.5238	0.1230	10:28:23	Yes
	Sample concentration is greater than that of the highest standard.						
2	11.65	11.65	0.1226	0.5219	0.1227	10:28:53	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	11.66	11.66	0.1227				
SD:	0.022	0.022	0.0002				
%RSD:	0.191	0.191	0.19				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 58 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 10:29:13**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.167	5.167	0.0546	0.2323	0.0548	10:30:04	Yes
2	5.181	5.181	0.0548	0.2326	0.0549	10:30:34	Yes
Mean:	5.174	5.174	0.0547				
SD:	0.010	0.010	0.0001				
%RSD:	0.195	0.195	0.19				

QC value within limits for Hg 253.7 Recovery = 103.48%
All analyte(s) passed QC.

Sequence No.: 59 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 10:30:52**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	0.0000	0.0005	0.0002	10:31:43	Yes
2	-0.033	-0.033	0.0001	0.0013	0.0002	10:32:13	Yes
Mean:	-0.035	-0.035	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	8.424	8.424	50.14				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60 **Autosampler Location: 52**
Sample ID: 1202019686|943278|1 **Date Collected: 1/28/2010 10:32:32**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019686|943278|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	12.34	12.34	0.1299	0.5561	0.1300	10:33:23	Yes
	Sample concentration is greater than that of the highest standard.						
2	12.27	12.27	0.1291	0.5508	0.1292	10:33:53	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	12.31	12.31	0.1295				
SD:	0.054	0.054	0.0006				
%RSD:	0.443	0.443	0.44				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 61 **Autosampler Location: 53**
Sample ID: 1202019687|943278|1 **Date Collected: 1/28/2010 10:34:12**
Analyst: JXL **Data Type: Original**

Mean:	0.180	0.180	0.0023
SD:	0.002	0.002	0.0000
%RSD:	1.223	1.223	0.99

==========

Sequence No.: 66 **Autosampler Location: 58**
Sample ID: 1202019727|943294|1 **Date Collected: 1/28/2010 10:42:34**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019727|943294|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	0.0001	0.0013	0.0002	10:43:25	Yes
2	-0.042	-0.042	-0.0000	0.0006	0.0001	10:43:55	Yes
Mean:	-0.038	-0.038	0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	14.59	14.59	163.60				

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Sequence No.: 67 **Autosampler Location: 59**
Sample ID: 1202019728|943294|10 **Date Collected: 1/28/2010 10:44:15**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019728|943294|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.852	3.852	0.0408	0.1757	0.0410	10:45:06	Yes
2	3.853	3.853	0.0408	0.1758	0.0410	10:45:36	Yes
Mean:	3.852	3.852	0.0408				
SD:	0.001	0.001	0.0000				
%RSD:	0.021	0.021	0.02				

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Sequence No.: 68 **Autosampler Location: 60**
Sample ID: 244242001|943294|1 **Date Collected: 1/28/2010 10:45:56**
Analyst: JXL **Data Type: Original**

Replicate Data: 244242001|943294|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.305	0.305	0.0036	0.0160	0.0038	10:46:47	Yes
2	0.299	0.299	0.0036	0.0157	0.0037	10:47:17	Yes
Mean:	0.302	0.302	0.0036				
SD:	0.004	0.004	0.0000				
%RSD:	1.352	1.352	1.19				

==========

Sequence No.: 69 **Autosampler Location: 61**
Sample ID: 1202019729|943294|1 **Date Collected: 1/28/2010 10:47:37**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019729|943294|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.292	0.292	0.0035	0.0154	0.0036	10:48:29	Yes
2	0.302	0.302	0.0036	0.0167	0.0038	10:48:59	Yes
Mean:	0.297	0.297	0.0036				
SD:	0.007	0.007	0.0001				
%RSD:	2.334	2.334	2.05				

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Sequence No.: 70 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 10:49:19**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.089	5.089	0.0538	0.2313	0.0539	10:50:10	Yes
2	5.073	5.073	0.0536	0.2297	0.0538	10:50:40	Yes
Mean:	5.081	5.081	0.0537				
SD:	0.012	0.012	0.0001				
%RSD:	0.229	0.229	0.23				

QC value within limits for Hg 253.7 Recovery = 101.62%
All analyte(s) passed QC.

Sequence No.: 71 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 10:50:59**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	0.0000	0.0006	0.0002	10:51:50	Yes
2	-0.035	-0.035	0.0001	0.0011	0.0002	10:52:20	Yes
Mean:	-0.036	-0.036	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.972	6.972	51.65				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72 **Autosampler Location: 62**
Sample ID: 1202019730|943294|1 **Date Collected: 1/28/2010 10:52:39**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019730|943294|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.356	2.356	0.0251	0.1071	0.0253	10:53:30	Yes
2	2.347	2.347	0.0250	0.1079	0.0252	10:54:00	Yes
Mean:	2.351	2.351	0.0251				
SD:	0.007	0.007	0.0001				
%RSD:	0.281	0.281	0.28				

Sequence No.: 73 **Autosampler Location: 63**
Sample ID: 1202019732|943294|1 **Date Collected: 1/28/2010 10:54:19**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019732|943294|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.405	2.405	0.0257	0.1099	0.0258	10:55:10	Yes
2	2.395	2.395	0.0255	0.1099	0.0257	10:55:40	Yes
Mean:	2.400	2.400	0.0256				
SD:	0.007	0.007	0.0001				
%RSD:	0.312	0.312	0.31				

Sequence No.: 74 **Autosampler Location: 64**
Sample ID: 1202019731|943294|5 **Date Collected: 1/28/2010 10:56:00**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019731|943294|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.028	0.028	0.0007	0.0034	0.0009	10:56:51	Yes
2	0.027	0.027	0.0007	0.0035	0.0009	10:57:21	Yes
Mean:	0.028	0.028	0.0007				
SD:	0.001	0.001	0.0000				
%RSD:	3.832	3.832	1.54				

2	0.374	0.374	0.0044	0.0197	0.0045	11:05:45	Yes
Mean:	0.373	0.373	0.0043				
SD:	0.002	0.002	0.0000				
%RSD:	0.659	0.659	0.59				

==========

Sequence No.: 80 **Autosampler Location: 70**
Sample ID: 244242007|943294|1 **Date Collected: 1/28/2010 11:06:05**
Analyst: JXL **Data Type: Original**

Replicate Data: 244242007|943294|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.400	2.400	0.0256	0.1107	0.0258	11:06:56	Yes
2	2.400	2.400	0.0256	0.1106	0.0257	11:07:26	Yes
Mean:	2.400	2.400	0.0256				
SD:	0.000	0.000	0.0000				
%RSD:	0.013	0.013	0.01				

==========

Sequence No.: 81 **Autosampler Location: 71**
Sample ID: 244242008|943294|1 **Date Collected: 1/28/2010 11:07:46**
Analyst: JXL **Data Type: Original**

Replicate Data: 244242008|943294|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.604	0.604	0.0068	0.0297	0.0069	11:08:37	Yes
2	0.608	0.608	0.0068	0.0304	0.0070	11:09:07	Yes
Mean:	0.606	0.606	0.0068				
SD:	0.003	0.003	0.0000				
%RSD:	0.450	0.450	0.42				

==========

Sequence No.: 82 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 11:09:27**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.053	5.053	0.0534	0.2302	0.0536	11:10:17	Yes
2	5.037	5.037	0.0533	0.2308	0.0534	11:10:47	Yes
Mean:	5.045	5.045	0.0533				
SD:	0.011	0.011	0.0001				
%RSD:	0.217	0.217	0.21				

QC value within limits for Hg 253.7 Recovery = 100.90%
All analyte(s) passed QC.

==========

Sequence No.: 83 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 11:11:06**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	0.0001	0.0004	0.0002	11:11:57	Yes
2	-0.038	-0.038	0.0000	0.0004	0.0002	11:12:26	Yes
Mean:	-0.036	-0.036	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	9.437	9.437	61.94				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 84 **Autosampler Location: 72**

1	0.736	0.736	0.0082	0.0361	0.0083	11:28:48	Yes
2	0.740	0.740	0.0082	0.0355	0.0083	11:29:18	Yes
Mean:	0.738	0.738	0.0082				
SD:	0.003	0.003	0.0000				
%RSD:	0.343	0.343	0.32				

Sequence No.: 94 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 11:29:38**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.943	4.943	0.0523	0.2273	0.0524	11:30:29	Yes
2	5.042	5.042	0.0533	0.2297	0.0535	11:30:59	Yes
Mean:	4.993	4.993	0.0528				
SD:	0.070	0.070	0.0007				
%RSD:	1.403	1.403	1.39				

QC value within limits for Hg 253.7 Recovery = 99.86%
All analyte(s) passed QC.

Sequence No.: 95 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 11:31:18**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	0.0000	0.0005	0.0002	11:32:08	Yes
2	-0.035	-0.035	0.0001	0.0009	0.0002	11:32:38	Yes
Mean:	-0.036	-0.036	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.882	5.882	42.30				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96 **Autosampler Location: 82**
Sample ID: 244515003|943299|1 **Date Collected: 1/28/2010 11:32:57**
Analyst: JXL **Data Type: Original**

Replicate Data: 244515003|943299|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.101	0.101	0.0015	0.0064	0.0016	11:33:49	Yes
2	0.112	0.112	0.0016	0.0074	0.0018	11:34:18	Yes
Mean:	0.106	0.106	0.0015				
SD:	0.008	0.008	0.0001				
%RSD:	7.655	7.655	5.51				

Sequence No.: 97 **Autosampler Location: 83**
Sample ID: 244515004|943299|1 **Date Collected: 1/28/2010 11:34:38**
Analyst: JXL **Data Type: Original**

Replicate Data: 244515004|943299|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.194	0.194	0.0025	0.0113	0.0026	11:35:30	Yes
2	0.192	0.192	0.0025	0.0110	0.0026	11:36:00	Yes
Mean:	0.193	0.193	0.0025				
SD:	0.001	0.001	0.0000				
%RSD:	0.566	0.566	0.47				

SD:	0.003	0.003	0.0000
%RSD:	3.765	3.765	2.37

==========

Sequence No.: 103 **Autosampler Location: 89**
Sample ID: 244604001|943299|1 **Date Collected: 1/28/2010 11:44:48**
Analyst: JXL **Data Type: Original**

Replicate Data: 244604001|943299|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.370	0.370	0.0043	0.0192	0.0045	11:45:40	Yes
2	0.370	0.370	0.0043	0.0193	0.0045	11:46:10	Yes
Mean:	0.370	0.370	0.0043				
SD:	0.000	0.000	0.0000				
%RSD:	0.006	0.006	0.01				

==========

Sequence No.: 104 **Autosampler Location: 90**
Sample ID: 244604002|943299|1 **Date Collected: 1/28/2010 11:46:30**
Analyst: JXL **Data Type: Original**

Replicate Data: 244604002|943299|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.274	0.274	0.0033	0.0153	0.0035	11:47:22	Yes
2	0.275	0.275	0.0033	0.0148	0.0035	11:47:51	Yes
Mean:	0.274	0.274	0.0033				
SD:	0.000	0.000	0.0000				
%RSD:	0.151	0.151	0.13				

==========

Sequence No.: 105 **Autosampler Location: 91**
Sample ID: 244622001|943299|1 **Date Collected: 1/28/2010 11:48:12**
Analyst: JXL **Data Type: Original**

Replicate Data: 244622001|943299|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.181	0.181	0.0023	0.0104	0.0025	11:49:03	Yes
2	0.175	0.175	0.0023	0.0096	0.0024	11:49:33	Yes
Mean:	0.178	0.178	0.0023				
SD:	0.004	0.004	0.0000				
%RSD:	2.197	2.197	1.78				

==========

Sequence No.: 106 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 11:49:53**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.038	5.038	0.0533	0.2265	0.0534	11:50:43	Yes
2	5.002	5.002	0.0529	0.2270	0.0530	11:51:13	Yes
Mean:	5.020	5.020	0.0531				
SD:	0.025	0.025	0.0003				
%RSD:	0.504	0.504	0.50				

QC value within limits for Hg 253.7 Recovery = 100.40%
All analyte(s) passed QC.

==========

Sequence No.: 107 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 11:51:32**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0000	0.0004	0.0001	11:52:22	Yes
2	-0.041	-0.041	0.0000	0.0005	0.0002	11:52:52	Yes
Mean:	-0.041	-0.041	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.117	0.117	46.35				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 108 Autosampler Location: 92
Sample ID: 1202019741|943299|1 Date Collected: 1/28/2010 11:53:11
Analyst: JXL Data Type: Original

Replicate Data: 1202019741|943299|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.174	0.174	0.0023	0.0101	0.0024	11:54:03	Yes
2	0.174	0.174	0.0023	0.0102	0.0024	11:54:33	Yes
Mean:	0.174	0.174	0.0023				
SD:	0.000	0.000	0.0000				
%RSD:	0.065	0.065	0.05				

==========

Sequence No.: 109 Autosampler Location: 93
Sample ID: 1202019742|943299|1 Date Collected: 1/28/2010 11:54:53
Analyst: JXL Data Type: Original

Replicate Data: 1202019742|943299|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.307	2.307	0.0246	0.1058	0.0248	11:55:45	Yes
2	2.306	2.306	0.0246	0.1055	0.0248	11:56:15	Yes
Mean:	2.307	2.307	0.0246				
SD:	0.001	0.001	0.0000				
%RSD:	0.052	0.052	0.05				

==========

Sequence No.: 110 Autosampler Location: 94
Sample ID: 1202019744|943299|1 Date Collected: 1/28/2010 11:56:35
Analyst: JXL Data Type: Original

Replicate Data: 1202019744|943299|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.339	2.339	0.0250	0.1076	0.0251	11:57:26	Yes
2	2.311	2.311	0.0247	0.1061	0.0248	11:57:56	Yes
Mean:	2.325	2.325	0.0248				
SD:	0.020	0.020	0.0002				
%RSD:	0.841	0.841	0.83				

==========

Sequence No.: 111 Autosampler Location: 95
Sample ID: 1202019743|943299|5 Date Collected: 1/28/2010 11:58:17
Analyst: JXL Data Type: Original

Replicate Data: 1202019743|943299|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0005	0.0027	0.0006	11:59:08	Yes
2	0.005	0.005	0.0005	0.0027	0.0006	11:59:38	Yes
Mean:	0.004	0.004	0.0005				
SD:	0.002	0.002	0.0000				
%RSD:	50.66	50.66	3.97				

Mean:	0.233	0.233	0.0029
SD:	0.003	0.003	0.0000
%RSD:	1.396	1.396	1.19

==========

Sequence No.: 117 **Autosampler Location: 101**
Sample ID: 244622007|943299|1 **Date Collected: 1/28/2010 12:08:29**
Analyst: JXL **Data Type: Original**

Replicate Data: 244622007|943299|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.135	0.135	0.0019	0.0083	0.0020	12:09:21	Yes
2	0.140	0.140	0.0019	0.0087	0.0020	12:09:51	Yes
Mean:	0.138	0.138	0.0019				
SD:	0.003	0.003	0.0000				
%RSD:	2.318	2.318	1.78				

==========

Sequence No.: 118 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 12:10:12**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.996	4.996	0.0528	0.2269	0.0530	12:11:02	Yes
2	5.006	5.006	0.0529	0.2271	0.0531	12:11:32	Yes
Mean:	5.001	5.001	0.0529				
SD:	0.006	0.006	0.0001				
%RSD:	0.129	0.129	0.13				

QC value within limits for Hg 253.7 Recovery = 100.02%
All analyte(s) passed QC.

==========

Sequence No.: 119 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 12:11:50**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	0.0000	0.0005	0.0002	12:12:41	Yes
2	-0.041	-0.041	-0.0000	0.0007	0.0001	12:13:11	Yes
Mean:	-0.041	-0.041	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.394	2.394	158.66				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 120 **Autosampler Location: 102**
Sample ID: 244622008|943299|1 **Date Collected: 1/28/2010 12:13:30**
Analyst: JXL **Data Type: Original**

Replicate Data: 244622008|943299|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.244	0.244	0.0030	0.0135	0.0031	12:14:22	Yes
2	0.236	0.236	0.0029	0.0128	0.0031	12:14:52	Yes
Mean:	0.240	0.240	0.0030				
SD:	0.006	0.006	0.0001				
%RSD:	2.548	2.548	2.17				

==========

Sequence No.: 121 **Autosampler Location: 103**
Sample ID: 1202019751|943305|1 **Date Collected: 1/28/2010 12:15:12**

Sequence No.: 126
Sample ID: 1202019756|943305|1
Analyst: JXL
Autosampler Location: 108
Date Collected: 1/28/2010 12:23:44
Data Type: Original

Replicate Data: 1202019756|943305|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.104	2.104	0.0225	0.0970	0.0226	12:24:35	Yes
2	2.105	2.105	0.0225	0.0962	0.0227	12:25:05	Yes
Mean:	2.105	2.105	0.0225				
SD:	0.001	0.001	0.0000				
%RSD:	0.059	0.059	0.06				

Sequence No.: 127
Sample ID: 1202019755|943305|5
Analyst: JXL
Autosampler Location: 109
Date Collected: 1/28/2010 12:25:26
Data Type: Original

Replicate Data: 1202019755|943305|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.022	-0.022	0.0002	0.0015	0.0004	12:26:17	Yes
2	-0.026	-0.026	0.0002	0.0012	0.0003	12:26:47	Yes
Mean:	-0.024	-0.024	0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	11.82	11.82	15.86				

Sequence No.: 128
Sample ID: 244601002|943305|1
Analyst: JXL
Autosampler Location: 110
Date Collected: 1/28/2010 12:27:08
Data Type: Original

Replicate Data: 244601002|943305|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.240	0.240	0.0030	0.0135	0.0031	12:28:00	Yes
2	0.237	0.237	0.0029	0.0136	0.0031	12:28:30	Yes
Mean:	0.239	0.239	0.0029				
SD:	0.003	0.003	0.0000				
%RSD:	1.064	1.064	0.91				

Sequence No.: 129
Sample ID: 244601003|943305|1
Analyst: JXL
Autosampler Location: 111
Date Collected: 1/28/2010 12:28:50
Data Type: Original

Replicate Data: 244601003|943305|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.218	0.218	0.0027	0.0124	0.0029	12:29:43	Yes
2	0.217	0.217	0.0027	0.0123	0.0029	12:30:13	Yes
Mean:	0.218	0.218	0.0027				
SD:	0.001	0.001	0.0000				
%RSD:	0.325	0.325	0.27				

Sequence No.: 130
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 1/28/2010 12:30:33
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.986	4.986	0.0527	0.2266	0.0529	12:31:23	Yes

2	4.997	4.997	0.0528	0.2271	0.0530	12:31:53	Yes
Mean:	4.992	4.992	0.0528				
SD:	0.007	0.007	0.0001				
%RSD:	0.145	0.145	0.14				

QC value within limits for Hg 253.7 Recovery = 99.83%
All analyte(s) passed QC.

Sequence No.: 131 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 12:32:12**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0000	0.0006	0.0002	12:33:03	Yes
2	-0.045	-0.045	-0.0000	0.0005	0.0001	12:33:33	Yes
Mean:	-0.043	-0.043	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	6.146	6.146	183.45				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 132 **Autosampler Location: 112**
Sample ID: 244601004|943305|1 **Date Collected: 1/28/2010 12:33:52**
Analyst: JXL **Data Type: Original**

Replicate Data: 244601004|943305|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.401	0.401	0.0046	0.0204	0.0048	12:34:44	Yes
2	0.396	0.396	0.0046	0.0204	0.0047	12:35:14	Yes
Mean:	0.398	0.398	0.0046				
SD:	0.003	0.003	0.0000				
%RSD:	0.848	0.848	0.77				

Sequence No.: 133 **Autosampler Location: 113**
Sample ID: 244601005|943305|1 **Date Collected: 1/28/2010 12:35:35**
Analyst: JXL **Data Type: Original**

Replicate Data: 244601005|943305|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.347	0.347	0.0041	0.0186	0.0042	12:36:26	Yes
2	0.347	0.347	0.0041	0.0179	0.0042	12:36:56	Yes
Mean:	0.347	0.347	0.0041				
SD:	0.000	0.000	0.0000				
%RSD:	0.037	0.037	0.03				

Sequence No.: 134 **Autosampler Location: 114**
Sample ID: 244601006|943305|1 **Date Collected: 1/28/2010 12:37:17**
Analyst: JXL **Data Type: Original**

Replicate Data: 244601006|943305|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.251	0.251	0.0031	0.0138	0.0032	12:38:09	Yes
2	0.251	0.251	0.0031	0.0142	0.0032	12:38:38	Yes
Mean:	0.251	0.251	0.0031				
SD:	0.000	0.000	0.0000				
%RSD:	0.028	0.028	0.02				

Sequence No.: 135 **Autosampler Location: 115**

%RSD:	0.060	0.060	0.05

==========

Sequence No.: 140 **Autosampler Location: 120**
Sample ID: 244601012|943305|1 **Date Collected: 1/28/2010 12:47:33**
Analyst: JXL **Data Type: Original**

Replicate Data: 244601012|943305|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.258	0.258	0.0031	0.0136	0.0033	12:48:25	Yes
2	0.263	0.263	0.0032	0.0140	0.0033	12:48:55	Yes
Mean:	0.261	0.261	0.0032				
SD:	0.004	0.004	0.0000				
%RSD:	1.524	1.524	1.31				

==========

Sequence No.: 141 **Autosampler Location: 121**
Sample ID: 244601013|943305|1 **Date Collected: 1/28/2010 12:49:15**
Analyst: JXL **Data Type: Original**

Replicate Data: 244601013|943305|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.340	0.340	0.0040	0.0182	0.0041	12:50:07	Yes
2	0.338	0.338	0.0040	0.0174	0.0041	12:50:37	Yes
Mean:	0.339	0.339	0.0040				
SD:	0.001	0.001	0.0000				
%RSD:	0.352	0.352	0.31				

==========

Sequence No.: 142 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 12:50:58**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.013	5.013	0.0530	0.2286	0.0531	12:51:48	Yes
2	4.982	4.982	0.0527	0.2268	0.0528	12:52:18	Yes
Mean:	4.998	4.998	0.0528				
SD:	0.022	0.022	0.0002				
%RSD:	0.438	0.438	0.43				

QC value within limits for Hg 253.7 Recovery = 99.95%
All analyte(s) passed QC.

==========

Sequence No.: 143 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 12:52:37**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	-0.0000	0.0002	0.0001	12:53:28	Yes
2	-0.046	-0.046	-0.0000	-0.0000	0.0001	12:53:58	Yes
Mean:	-0.045	-0.045	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.775	2.775	34.78				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 144 **Autosampler Location: 122**
Sample ID: 1202019757|943309|1 **Date Collected: 1/28/2010 12:54:17**
Analyst: JXL **Data Type: Original**

SD:	0.003	0.003	0.0000
%RSD:	2.652	2.652	1.87

==========

Sequence No.: 154 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 13:11:26**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.082	5.082	0.0537	0.2332	0.0539	13:12:17	Yes
2	5.104	5.104	0.0539	0.2332	0.0541	13:12:47	Yes
Mean:	5.093	5.093	0.0538				
SD:	0.015	0.015	0.0002				
%RSD:	0.299	0.299	0.30				

QC value within limits for Hg 253.7 Recovery = 101.86%
All analyte(s) passed QC.

==========

Sequence No.: 155 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 13:13:05**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.044	-0.044	-0.0000	0.0004	0.0001	13:13:56	Yes
2	-0.045	-0.045	-0.0000	0.0004	0.0001	13:14:26	Yes
Mean:	-0.045	-0.045	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.576	1.576	20.73				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 156 **Autosampler Location: 132**
Sample ID: 244628005|943309|1 **Date Collected: 1/28/2010 13:14:45**
Analyst: JXL **Data Type: Original**

Replicate Data: 244628005|943309|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.020	0.020	0.0006	0.0029	0.0008	13:15:37	Yes
2	0.024	0.024	0.0007	0.0033	0.0008	13:16:07	Yes
Mean:	0.022	0.022	0.0007				
SD:	0.003	0.003	0.0000				
%RSD:	13.95	13.95	4.81				

==========

Sequence No.: 157 **Autosampler Location: 133**
Sample ID: 244628006|943309|1 **Date Collected: 1/28/2010 13:16:28**
Analyst: JXL **Data Type: Original**

Replicate Data: 244628006|943309|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.471	0.471	0.0054	0.0237	0.0055	13:17:20	Yes
2	0.470	0.470	0.0054	0.0235	0.0055	13:17:50	Yes
Mean:	0.470	0.470	0.0054				
SD:	0.001	0.001	0.0000				
%RSD:	0.211	0.211	0.19				

==========

Sequence No.: 158 **Autosampler Location: 134**
Sample ID: 244628007|943309|1 **Date Collected: 1/28/2010 13:18:11**
Analyst: JXL **Data Type: Original**

Sequence No.: 163
Sample ID: 244628012|943309|1
Analyst: JXL
Autosampler Location: 139
Date Collected: 1/28/2010 13:26:48
Data Type: Original

Replicate Data: 244628012|943309|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.158	0.158	0.0021	0.0097	0.0022	13:27:40	Yes
2	0.158	0.158	0.0021	0.0093	0.0022	13:28:10	Yes
Mean:	0.158	0.158	0.0021				
SD:	0.000	0.000	0.0000				
%RSD:	0.209	0.209	0.17				

Sequence No.: 164
Sample ID: 244628013|943309|1
Analyst: JXL
Autosampler Location: 140
Date Collected: 1/28/2010 13:28:31
Data Type: Original

Replicate Data: 244628013|943309|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.130	0.130	0.0018	0.0081	0.0019	13:29:23	Yes
2	0.130	0.130	0.0018	0.0077	0.0020	13:29:53	Yes
Mean:	0.130	0.130	0.0018				
SD:	0.000	0.000	0.0000				
%RSD:	0.042	0.042	0.03				

Sequence No.: 165
Sample ID: 244628014|943309|1
Analyst: JXL
Autosampler Location: 141
Date Collected: 1/28/2010 13:30:14
Data Type: Original

Replicate Data: 244628014|943309|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.028	0.028	0.0007	0.0036	0.0009	13:31:06	Yes
2	0.029	0.029	0.0007	0.0033	0.0009	13:31:36	Yes
Mean:	0.028	0.028	0.0007				
SD:	0.001	0.001	0.0000				
%RSD:	3.720	3.720	1.51				

Sequence No.: 166
Sample ID: CCV
Analyst:
Autosampler Location: 7
Date Collected: 1/28/2010 13:31:57
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.175	5.175	0.0547	0.2368	0.0548	13:32:48	Yes
2	5.189	5.189	0.0548	0.2361	0.0550	13:33:18	Yes
Mean:	5.182	5.182	0.0548				
SD:	0.010	0.010	0.0001				
%RSD:	0.185	0.185	0.18				

QC value within limits for Hg 253.7 Recovery = 103.64%
All analyte(s) passed QC.

Sequence No.: 167
Sample ID: CCB
Analyst:
Autosampler Location: 8
Date Collected: 1/28/2010 13:33:36
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.046	-0.046	-0.0000	-0.0003	0.0001	13:34:27	Yes
2	-0.043	-0.043	-0.0000	0.0003	0.0001	13:34:57	Yes
Mean:	-0.045	-0.045	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	4.570	4.570	61.73				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 168 **Autosampler Location: 142**
Sample ID: 244628015|943309|1 **Date Collected: 1/28/2010 13:35:16**
Analyst: JXL **Data Type: Original**

Replicate Data: 244628015|943309|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.425	0.425	0.0049	0.0216	0.0050	13:36:09	Yes
2	0.425	0.425	0.0049	0.0212	0.0050	13:36:39	Yes
Mean:	0.425	0.425	0.0049				
SD:	0.000	0.000	0.0000				
%RSD:	0.018	0.018	0.02				

==========

Sequence No.: 169 **Autosampler Location: 143**
Sample ID: 244628016|943309|1 **Date Collected: 1/28/2010 13:37:00**
Analyst: JXL **Data Type: Original**

Replicate Data: 244628016|943309|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.017	0.017	0.0006	0.0030	0.0008	13:37:52	Yes
2	0.010	0.010	0.0005	0.0022	0.0007	13:38:22	Yes
Mean:	0.013	0.013	0.0006				
SD:	0.005	0.005	0.0001				
%RSD:	36.35	36.35	8.83				

==========

Sequence No.: 170 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 13:38:43**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.177	5.177	0.0547	0.2382	0.0549	13:39:33	Yes
2	5.185	5.185	0.0548	0.2374	0.0550	13:40:03	Yes
Mean:	5.181	5.181	0.0548				
SD:	0.006	0.006	0.0001				
%RSD:	0.117	0.117	0.12				

QC value within limits for Hg 253.7 Recovery = 103.62%
All analyte(s) passed QC.

==========

Sequence No.: 171 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 13:40:22**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0000	0.0001	0.0001	13:41:13	Yes
2	-0.047	-0.047	-0.0001	-0.0003	0.0001	13:41:42	Yes
Mean:	-0.044	-0.044	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	9.097	9.097	145.21				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Analysis Begun

Logged In Analyst: Administrator
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\012810S1.SIF
Batch ID:
Results Data Set: 012810S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

Method Loaded
Method Name: SOIL
Method Last Saved: 1/4/2010 13:53:20
Method Description: 7471A, ILM04 ANALYST JXL

Sequence No.: 1
Autosampler Location: 51
Sample ID: 244920001|943278|2
Date Collected: 1/28/2010 14:05:24
Analyst: JXL
Data Type: Original

Replicate Data: 244920001|943278|2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.714	5.714	0.0603	0.2734	0.0605	14:06:14	Yes
2	5.523	5.523	0.0583	0.2620	0.0585	14:06:44	Yes
Mean:	5.619	5.619	0.0593				
SD:	0.135	0.135	0.0014				
%RSD:	2.398	2.398	2.38				

Sequence No.: 2
Autosampler Location: 52
Sample ID: 1202019686|943278|2
Date Collected: 1/28/2010 14:07:04
Analyst: JXL
Data Type: Original

Replicate Data: 1202019686|943278|2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	6.168	6.168	0.0651	0.2932	0.0653	14:07:55	Yes
2	6.061	6.061	0.0640	0.2881	0.0641	14:08:25	Yes
Mean:	6.115	6.115	0.0645				
SD:	0.076	0.076	0.0008				
%RSD:	1.236	1.236	1.23				

Sequence No.: 3
Autosampler Location: 53
Sample ID: 1202019687|943278|2
Date Collected: 1/28/2010 14:08:44
Analyst: JXL
Data Type: Original

Replicate Data: 1202019687|943278|2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	6.806	6.806	0.0718	0.3218	0.0720	14:09:35	Yes
2	6.675	6.675	0.0704	0.3139	0.0706	14:10:05	Yes
Mean:	6.741	6.741	0.0711				
SD:	0.093	0.093	0.0010				
%RSD:	1.376	1.376	1.37				

Sequence No.: 4
Autosampler Location: 54
Sample ID: 1202019689|943278|2
Date Collected: 1/28/2010 14:10:25
Analyst: JXL
Data Type: Original

Replicate Data: 1202019689|943278|2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	7.149	7.149	0.0754	0.3380	0.0756	14:11:16	Yes
2	7.138	7.138	0.0753	0.3358	0.0754	14:11:46	Yes
Mean:	7.144	7.144	0.0753				
SD:	0.008	0.008	0.0001				
%RSD:	0.114	0.114	0.11				

==========

Sequence No.: 5 **Autosampler Location: 55**
Sample ID: 1202019688|943278|10 **Date Collected: 1/28/2010 14:12:05**
Analyst: JXL **Data Type: Original**

Replicate Data: 1202019688|943278|10

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.174	1.174	0.0127	0.0575	0.0129	14:12:57	Yes
2	1.171	1.171	0.0127	0.0573	0.0129	14:13:26	Yes
Mean:	1.173	1.173	0.0127				
SD:	0.002	0.002	0.0000				
%RSD:	0.207	0.207	0.20				

==========

Sequence No.: 6 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 1/28/2010 14:13:46**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.221	5.221	0.0552	0.2483	0.0553	14:14:37	Yes
2	5.210	5.210	0.0551	0.2456	0.0552	14:15:07	Yes
Mean:	5.216	5.216	0.0551				
SD:	0.008	0.008	0.0001				
%RSD:	0.146	0.146	0.14				

QC value within limits for Hg 253.7 Recovery = 104.31%
All analyte(s) passed QC.

==========

Sequence No.: 7 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 1/28/2010 14:15:25**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	0.0001	0.0014	0.0003	14:16:17	Yes
2	-0.032	-0.032	0.0001	0.0012	0.0002	14:16:46	Yes
Mean:	-0.032	-0.032	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.076	2.076	7.02				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Miscellaneous

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 940113

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202011786	UI062540-MS	.523	g
MS	1202011788	UI091015-A	.5	mL
MS	1202011788	UI091015-B	.5	mL
MSD	1202011790	UI091015-A	.5	mL
MSD	1202011790	UI091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202011785		SW846 3050B	12-JAN-2010 07:30	0.523 g	50 mL	95.60229	SOIL
LCS	1202011786		SW846 3050B	12-JAN-2010 07:30	0.523 g	50 mL	95.60229	SOIL
SAMPLE	244228001		SW846 3050B	12-JAN-2010 07:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	244228002		SW846 3050B	12-JAN-2010 07:30	0.505 g	50 mL	99.0099	SOIL
SAMPLE	244228003		SW846 3050B	12-JAN-2010 07:30	0.505 g	50 mL	99.0099	SOIL
SAMPLE	244228004		SW846 3050B	12-JAN-2010 07:30	0.512 g	50 mL	97.65625	SOIL
SAMPLE	244228005		SW846 3050B	12-JAN-2010 07:30	0.516 g	50 mL	96.89922	SOIL
SAMPLE	244228006		SW846 3050B	12-JAN-2010 07:30	0.505 g	50 mL	99.0099	SOIL
SAMPLE	244242001		SW846 3050B	12-JAN-2010 07:30	0.507 g	50 mL	98.61933	SOIL
DUP	1202011787	244242001	SW846 3050B	12-JAN-2010 07:30	0.505 g	50 mL	99.0099	SOIL
MS	1202011788	244242001	SW846 3050B	12-JAN-2010 07:30	0.518 g	50 mL	96.5251	SOIL
MSD	1202011790	244242001	SW846 3050B	12-JAN-2010 07:30	0.5 g	50 mL	100	SOIL
SDILT	1202011789	244242001	SW846 3050B	12-JAN-2010 07:30	0.507 g	50 mL	98.61933	SOIL
SAMPLE	244242002		SW846 3050B	12-JAN-2010 07:30	0.519 g	50 mL	96.33911	SOIL
SAMPLE	244242003		SW846 3050B	12-JAN-2010 07:30	0.525 g	50 mL	95.2381	SOIL
SAMPLE	244242004		SW846 3050B	12-JAN-2010 07:30	0.51 g	50 mL	98.03922	SOIL
SAMPLE	244242005		SW846 3050B	12-JAN-2010 07:30	0.525 g	50 mL	95.2381	SOIL
SAMPLE	244242006		SW846 3050B	12-JAN-2010 07:30	0.509 g	50 mL	98.23183	SOIL
SAMPLE	244242007		SW846 3050B	12-JAN-2010 07:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	244242008		SW846 3050B	12-JAN-2010 07:30	0.507 g	50 mL	98.61933	SOIL
SAMPLE	244242009		SW846 3050B	12-JAN-2010 07:30	0.503 g	50 mL	99.40358	SOIL
SAMPLE	244242010		SW846 3050B	12-JAN-2010 07:30	0.52 g	50 mL	96.15385	SOIL
SAMPLE	244242011		SW846 3050B	12-JAN-2010 07:30	0.523 g	50 mL	95.60229	SOIL
SAMPLE	244242012		SW846 3050B	12-JAN-2010 07:30	0.5 g	50 mL	100	SOIL
SAMPLE	244242013		SW846 3050B	12-JAN-2010 07:30	0.505 g	50 mL	99.0099	SOIL
SAMPLE	244242014		SW846 3050B	12-JAN-2010 07:30	0.518 g	50 mL	96.5251	SOIL

Reagent/Solvent Lot ID Amount Description

Prep LogBook

1203655-02	1.5 mL	Hydrogen Peroxide 30%
1252836	5 mL	Nitric Acid CONC.

Comments: Sample 244242001 consist of rocky, gray soil.

Prep LogBook

Analyst: AXG2 Verified by:_____

Batch: 940157

Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202011875	UI062540-I	.506	g
MS	1202011877	UI091216-01	.25	mL
MS	1202011877	UI091216-06	.25	mL
MSD	1202011879	UI091216-01	.25	mL
MSD	1202011879	UI091216-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202011874		SW846 3050B	12-JAN-2010 08:00	0.513 g	50 mL	97.46589	SOIL
LCS	1202011875		SW846 3050B	12-JAN-2010 08:00	0.506 g	50 mL	98.81423	SOIL
SAMPLE	244228001		SW846 3050B	12-JAN-2010 08:00	0.522 g	50 mL	95.78544	SOIL
SAMPLE	244228002		SW846 3050B	12-JAN-2010 08:00	0.505 g	50 mL	99.0099	SOIL
SAMPLE	244228003		SW846 3050B	12-JAN-2010 08:00	0.521 g	50 mL	95.96929	SOIL
SAMPLE	244228004		SW846 3050B	12-JAN-2010 08:00	0.525 g	50 mL	95.2381	SOIL
SAMPLE	244228005		SW846 3050B	12-JAN-2010 08:00	0.515 g	50 mL	97.08738	SOIL
SAMPLE	244228006		SW846 3050B	12-JAN-2010 08:00	0.508 g	50 mL	98.4252	SOIL
SAMPLE	244242001		SW846 3050B	12-JAN-2010 08:00	0.522 g	50 mL	95.78544	SOIL
DUP	1202011876	244242001	SW846 3050B	12-JAN-2010 08:00	0.506 g	50 mL	98.81423	SOIL
MS	1202011877	244242001	SW846 3050B	12-JAN-2010 08:00	0.516 g	50 mL	96.89922	SOIL
MSD	1202011879	244242001	SW846 3050B	12-JAN-2010 08:00	0.512 g	50 mL	97.65625	SOIL
SDILT	1202011878	244242001	SW846 3050B	12-JAN-2010 08:00	0.522 g	50 mL	95.78544	SOIL
SAMPLE	244242002		SW846 3050B	12-JAN-2010 08:00	0.512 g	50 mL	97.65625	SOIL
SAMPLE	244242003		SW846 3050B	12-JAN-2010 08:00	0.512 g	50 mL	97.65625	SOIL
SAMPLE	244242004		SW846 3050B	12-JAN-2010 08:00	0.511 g	50 mL	97.84736	SOIL
SAMPLE	244242005		SW846 3050B	12-JAN-2010 08:00	0.515 g	50 mL	97.08738	SOIL
SAMPLE	244242006		SW846 3050B	12-JAN-2010 08:00	0.52 g	50 mL	96.15385	SOIL
SAMPLE	244242007		SW846 3050B	12-JAN-2010 08:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	244242008		SW846 3050B	12-JAN-2010 08:00	0.515 g	50 mL	97.08738	SOIL
SAMPLE	244242009		SW846 3050B	12-JAN-2010 08:00	0.506 g	50 mL	98.81423	SOIL
SAMPLE	244242010		SW846 3050B	12-JAN-2010 08:00	0.504 g	50 mL	99.20635	SOIL
SAMPLE	244242011		SW846 3050B	12-JAN-2010 08:00	0.525 g	50 mL	95.2381	SOIL
SAMPLE	244242012		SW846 3050B	12-JAN-2010 08:00	0.503 g	50 mL	99.40358	SOIL
SAMPLE	244242013		SW846 3050B	12-JAN-2010 08:00	0.517 g	50 mL	96.7118	SOIL
SAMPLE	244242014		SW846 3050B	12-JAN-2010 08:00	0.525 g	50 mL	95.2381	SOIL

Reagent/Solvent Lot ID Amount Description

Prep LogBook

1252838	10 mL	HYDROCHLORIC ACID
1252836	1.25 mL	Nitric Acid CONC.

Comments: Sample 244242001 consist of rocky, gray soil.

Prep LogBook

Analyst: TXB3 Verified by:_____

Batch: 943275

Lab SOP: GL-MA-E-010 REV# 23

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202019685	UI031809A	.209	g
MS	1202019687	WHG100127-14	.3	mL
MSD	1202019689	WHG100127-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202019684		SW846 7471A Prep	27-JAN-2010 12:00	0.552 g	30 mL	54.34783	SOIL
LCS	1202019685		SW846 7471A Prep	27-JAN-2010 12:00	0.209 g	30 mL	143.54067	SOIL
SAMPLE	244228001		SW846 7471A Prep	27-JAN-2010 12:00	0.511 g	30 mL	58.70841	SOIL
SAMPLE	244228002		SW846 7471A Prep	27-JAN-2010 12:00	0.599 g	30 mL	50.08347	SOIL
SAMPLE	244228003		SW846 7471A Prep	27-JAN-2010 12:00	0.535 g	30 mL	56.07477	SOIL
SAMPLE	244228004		SW846 7471A Prep	27-JAN-2010 12:00	0.559 g	30 mL	53.66726	SOIL
SAMPLE	244228005		SW846 7471A Prep	27-JAN-2010 12:00	0.52 g	30 mL	57.69231	SOIL
SAMPLE	244228006		SW846 7471A Prep	27-JAN-2010 12:00	0.508 g	30 mL	59.05512	SOIL
SAMPLE	244888001		SW846 7471A Prep	27-JAN-2010 12:00	0.6 g	30 mL	50	SOIL
SAMPLE	244888002		SW846 7471A Prep	27-JAN-2010 12:00	0.547 g	30 mL	54.84461	SOIL
SAMPLE	244888003		SW846 7471A Prep	27-JAN-2010 12:00	0.565 g	30 mL	53.09735	SOIL
SAMPLE	244888004		SW846 7471A Prep	27-JAN-2010 12:00	0.6 g	30 mL	50	SOIL
SAMPLE	244888005		SW846 7471A Prep	27-JAN-2010 12:00	0.597 g	30 mL	50.25126	SOIL
SAMPLE	244888006		SW846 7471A Prep	27-JAN-2010 12:00	0.539 g	30 mL	55.65863	SOIL
SAMPLE	244892001		SW846 7471A Prep	27-JAN-2010 12:00	0.503 g	30 mL	59.64215	SOIL
SAMPLE	244892002		SW846 7471A Prep	27-JAN-2010 12:00	0.532 g	30 mL	56.39098	SOIL
SAMPLE	244892003		SW846 7471A Prep	27-JAN-2010 12:00	0.556 g	30 mL	53.95683	SOIL
SAMPLE	244892004		SW846 7471A Prep	27-JAN-2010 12:00	0.554 g	30 mL	54.15162	SOIL
SAMPLE	244920001		SW846 7471A Prep	27-JAN-2010 12:00	0.545 g	30 mL	55.04587	SOIL
DUP	1202019686	244920001	SW846 7471A Prep	27-JAN-2010 12:00	0.55 g	30 mL	54.54545	SOIL
MS	1202019687	244920001	SW846 7471A Prep	27-JAN-2010 12:00	0.524 g	30 mL	57.25191	SOIL
MSD	1202019689	244920001	SW846 7471A Prep	27-JAN-2010 12:00	0.547 g	30 mL	54.84461	SOIL
SDILT	1202019688	244920001	SW846 7471A Prep	27-JAN-2010 12:00	0.545 g	30 mL	55.04587	SOIL
SAMPLE	244920002		SW846 7471A Prep	27-JAN-2010 12:00	0.527 g	30 mL	56.926	SOIL
SAMPLE	244920003		SW846 7471A Prep	27-JAN-2010 12:00	0.505 g	30 mL	59.40594	SOIL

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1257474-1	.375 mL	NITRIC ACID
1255535-C	7.5 mL	5% KMnO4 solution
1255532-C	2 mL	Hg reducing agent

Comments: Sample 244920001 is a dry rocky brown soil.
Digestion Start Date: 27-JAN-10 12:00
Digestion End Date: 27-JAN-10 12:30

Prep LogBook

WHG100127-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100127-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100127-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100127-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100127-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG100127-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

DER Report No.: 785647
Revision No.:

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
01-FEB-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
940165	See Below		

Potentially affected work order(s)(SDG): 244228(10-1161-2),244242(10-1174)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed Recovery for MS/PS: QC 1202011877MS 2. Failed RPD for DUP: QC 1202011876DUP 3. Failed Recovery for MSD/PSD: QC 1202011879MSD	1. The matrix spike recovery failed outside of the control limits for calcium,magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The sample and sample duplicate % RPD failed outside the control limits for lead and manganese due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike duplicate recovery failed outside of the control limits for magnesium and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:
Helen Camello 02-FEB-10

Data Validator/Group Leader:
Louise Smith 02-FEB-10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI062540-MS **Opened:** 12-JUN-09 **Lot Number :** D062-540
Name: ICPMS SOIL SRM **Received:** 12-JUN-09
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091015-A **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS
Description: SILICON 1000mg/L H20/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091212-11 **Opened:** 12-DEC-09 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 12-DEC-09 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 12-DEC-10 **Lot Number :** 1015303
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI091216-01 **Opened:** 16-DEC-09 **Lot Number :** 1018095
Name: METALSPIKE-1 **Received:** 16-DEC-09
Type: Source Material **Expires:** 16-DEC-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL

Analyte	Concentration	Analyte	Concentration
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI091216-06 **Opened:** 16-DEC-09 **Lot Number :** 1018096
Name: METALSPIKE-2 **Received:** 16-DEC-09
Type: Source Material **Expires:** 16-DEC-10
Employee: Francena Armstrong
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Standard Logbook

Serial ID:	UI091217-13	**Opened:**	17-DEC-09	**Amount :**	250 mL
Name:	ICP-MS ICSAB Master C	**Received:**	17-DEC-09	**Catalog Number :**	160033-03
Type:	Source Material	**Expires:**	17-DEC-10	**Lot Number :**	1016926
Employee:	Paul Boyd			**Solvent :**	+/- 0.5% in 2% HNO3
Supplier:	02SI				
Description:	ICPMS ICSAB Master C				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID:	UI100114-40	**Opened:**	14-JAN-10	**Amount :**	500 mL
Name:	ICP HIGH RANGE STD-A	**Received:**	14-JAN-10	**Catalog Number :**	160211-05-03
Type:	Source Material	**Expires:**	14-JAN-11	**Lot Number :**	1018160
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3
Supplier:	02SI				
Description:	ICP HIGH RANGE STD SOLUTION A				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID:	UI100114-41	**Opened:**	14-JAN-10	**Amount :**	500 mL
Name:	ICP HIGH RANGE STD B	**Received:**	14-JAN-10	**Catalog Number :**	160211-05-03
Type:	Source Material	**Expires:**	14-JAN-11	**Lot Number :**	1018160
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3
Supplier:	02SI				
Description:	ICP HIGH RANGE STD SOLUTION B				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100114-48 **Opened:** 22-JAN-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 18-JAN-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 22-JAN-11 **Lot Number :** 1018466
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100114-49.5 **Opened:** 27-JAN-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 18-JAN-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 28-JAN-10 **Lot Number :** 1018458
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Inteferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Standard Logbook

Serial ID: UI100128-40 **Opened:** 28-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 28-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 28-JAN-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100128-41 **Opened:** 28-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 28-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 28-JAN-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG100127-01 **Opened:** 27-JAN-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 27-JAN-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 28-JAN-10 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100127-02 **Opened:** 27-JAN-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Intermediate **Expires:** 28-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG100127-07 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100127-08 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100127-09 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100127-10 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100127-11 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100127-12 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100127-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100127-14 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 27-JAN-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 03-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100127-42 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100127-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100127-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100127-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100127-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100127-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100127-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100127-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Serial ID: WI100127-43 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI100127-44 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1259494
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI100127-45 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI100127-46 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1259494
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100127-47 **Opened:** 27-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 28-JAN-10 **Solvent :** 3%HCL &1%HNO3-1259494
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI100129-42 **Opened:** 29-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 30-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100129-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100129-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100129-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100129-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100129-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100129-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100129-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100129-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100129-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100129-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100129-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100129-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100129-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100129-43 **Opened:** 29-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 30-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI100129-44 **Opened:** 29-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 30-JAN-10 **Solvent :** 3%HCL and 1 %HNO3-1259494
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI100129-45 **Opened:** 29-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 30-JAN-10 **Solvent :** 3%HCL and 1%HNO3 -1259494
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI100129-46 **Opened:** 29-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 30-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1259494
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100129-47 **Opened:** 29-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 30-JAN-10 **Solvent :** 3%HCL &1%HNO3-1259494
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100119-04AB **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 19-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100119-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100119-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100119-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100119-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100119-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100119-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100119-04B **Opened:** 19-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 19-JAN-10 **Balance Id :** 40245216
Type: Working **Expires:** 20-JAN-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1256053
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100119-05B
Name: ICPMS ICV
Type: Working
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

Opened: 19-JAN-10
Received: 19-JAN-10
Expires: 20-JAN-10

Balance Id : 40245216
Pipet Id : 1758088
Solvent : 2%HNO3/1%HCl - 1256053

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS100119-06B
Name: ICPMS CRDL
Type: Working
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Opened: 19-JAN-10
Received: 19-JAN-10
Expires: 20-JAN-10

Balance Id : 40245216
Pipet Id : 3820544
Solvent : 2%HNO3/1%HCl - 1256053

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS100119-07B **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 19-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 20-JAN-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1256053
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100119-08B **Opened:** 19-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 19-JAN-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 20-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1256053
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI091212-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI091212-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI091212-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1203655-02 **Opened:** 15-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 15-OCT-09
Type: Reagent/Solvent **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCl-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxlyamine Hydrochloride
Comments: None

Standard Logbook

Serial ID: 1236355-A **Opened:** 01-DEC-09 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 01-DEC-09
Type: Reagent/Solvent **Expires:** 01-DEC-10
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1238345 **Opened:** 04-DEC-09 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 04-DEC-09
Type: Reagent/Solvent **Expires:** 04-DEC-10
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1244970 **Opened:** 18-DEC-09 **Lot Number :** H41032
Name: I-HCL **Received:** 18-DEC-09 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 18-DEC-10
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1252836 **Opened:** 08-JAN-10 **Lot Number :** H20053 L
Name: I-HNO3 **Received:** 08-JAN-10
Type: Reagent/Solvent **Expires:** 08-JAN-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1252838 **Opened:** 08-JAN-10 **Lot Number :** H41032
Name: I-HCL **Received:** 08-JAN-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 08-JAN-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1255535-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1256053 **Opened:** 18-JAN-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 18-JAN-10
Type: Reagent/Solvent **Expires:** 25-JAN-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1238345	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1244970	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1257474-1 **Opened:** 20-JAN-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 20-JAN-10 **Lot Number :** H20053
Type: Reagent/Solvent **Expires:** 20-JAN-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Standard Logbook

Serial ID:	1259494	**Opened:**	25-JAN-10	**Amount :**	20 L
Name:	B-ICP-RINSE SOLN	**Received:**	28-DEC-10	**Lot Number :**	H04040+G34050
Type:	Reagent/Solvent	**Expires:**	31-JAN-10	**Solvent :**	3%HCL+1%HNO3

Employee: Helen Camello

Supplier: GEL

Description: 3%HCL+1%HNO3 RINSE SOLN.

Comments: None

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1161

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	940627	**Method:**	SW846 9012A
Prep Batch :	940626	**Method:**	SW846 9010B Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
244226001	RE12-10-7738
244226002	RE12-10-7737
1202013064	Method Blank (MB)
1202013065	244226001(RE12-10-7738) Sample Duplicate (DUP)
1202013066	244236001(CALA-10-9193) Sample Duplicate (DUP)
1202013067	244226001(RE12-10-7738) Matrix Spike (MS)
1202013068	244236001(CALA-10-9193) Matrix Spike (MS)
1202013069	244226001(RE12-10-7738) Matrix Spike Duplicate (MSD)
1202013070	244236001(CALA-10-9193) Matrix Spike Duplicate (MSD)
1202013071	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule
The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 244226001 (RE12-10-7738) and 244236001 (CALA-10-9193).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202013066 (CALA-10-9193).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Data Exception (DER) Documentation
A DER was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 02Feb10

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1161 GEL Work Order: 244226

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 20, 2010

Client SDG: 10-1161

Client Sample ID:	RE12-10-7738	Project:	LANL01004
Sample ID:	244226001	Client ID:	LANL010
Matrix:	W		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 01/18/10	1253	940627	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	1530	940626

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 20, 2010

Clicnt SDG: 10-1161

Client Sample ID:	RE12-10-7737	Project:	LANL01004
Sample ID:	244226002	Client ID:	LANL010
Matrix:	W		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 01/18/10	1257	940627	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	1530	940626

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: January 20, 2010
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 244226

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 940627											
QC1202013065 244226001 DUP											
Cyanide, Total		U	ND	U	ND	ug/L	N/A			AXC2	01/18/10 12:54
QC1202013066 244236001 DUP											
Cyanide, Total		U	ND	U	ND	ug/L	N/A				01/18/10 12:58
QC1202013071 LCS											
Cyanide, Total	50.0				53.9	ug/L		108	(90%-110%)		01/18/10 12:52
QC1202013064 MB											
Cyanide, Total				U	5.00	ug/L					01/18/10 12:51
QC1202013067 244226001 MS											
Cyanide, Total	100	U	ND		99.5	ug/L		99.5	(60%-127%)		01/18/10 12:55
QC1202013068 244236001 MS											
Cyanide, Total	100	U	ND		105	ug/L		105	(60%-127%)		01/18/10 12:59
QC1202013069 244226001 MSD											
Cyanide, Total	100	U	ND		108	ug/L	8.19	108	(0%-20%)		01/18/10 12:56
QC1202013070 244236001 MSD											
Cyanide, Total	100	U	ND		105	ug/L	0.00	105	(0%-20%)		01/18/10 13:04

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.

QC Summary

Workorder: 244226

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 02-FEB-2010 16:59

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1161

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**18-JAN-2010 12:46:12**	**OM_1-18-2010_12-35-44**	**156**	**150**	**104**	**(90%-110%)**	**Yes**
CCV	18-JAN-2010 13:00:29	OM_1-18-2010_12-35-44	109	100	109	(90%-110%)	Yes
CCV	18-JAN-2010 13:12:54	OM_1-18-2010_12-35-44	109	100	109	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**18-JAN-2010 12:48:02**	**OM_1-18-2010_12-35-44**	**-3.54**	**5**	**Yes**
CCB	18-JAN-2010 13:02:19	OM_1-18-2010_12-35-44	-2.87	5	Yes
CCB	18-JAN-2010 13:14:44	OM_1-18-2010_12-35-44	-4.31	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 940626

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202013071	URF1184831-02	.0125	mL
MS	1202013067	URF1184831-02	.025	mL
MS	1202013068	URF1184831-02	.025	mL
MSD	1202013069	URF1184831-02	.025	mL
MSD	1202013070	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202013064		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
LCS	1202013071		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244226001		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
DUP	1202013065	244226001	SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
MS	1202013067	244226001	SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
MSD	1202013069	244226001	SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244226002		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244236001		EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	GROUND WATER
DUP	1202013066	244236001	EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	GROUND WATER
MS	1202013068	244236001	EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	GROUND WATER
MSD	1202013070	244236001	EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	244236004		EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	244240002		EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	244243001		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244243002		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244243003		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244243004		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244516001		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244516002		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244523001		SW846 9010B Prep	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244525001		EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	244525003		EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	244532001		EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	244537001		EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	244574001		EPA 335.4	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER
SAMPLE	244580001		SW846 9010C Distillation	15-JAN-2010 15:30	>12	25 mL	25 mL	1	MISC LIQUID
SAMPLE	244583001		SM 4500-Cn C	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WASTE WATER
SAMPLE	244609005		EPA 335.3	15-JAN-2010 15:30	>12	25 mL	25 mL	1	WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN100114-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1238146-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1238142-C	1.25 mL	Bismuth Nitrate Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	1/18/2010 12:39:03	OM_1-18-2010_12-35-44
150 ppb		1	axc2	1/18/2010 12:39:55	OM_1-18-2010_12-35-44
100 ppb		1	axc2	1/18/2010 12:40:48	OM_1-18-2010_12-35-44
50 ppb		1	axc2	1/18/2010 12:41:40	OM_1-18-2010_12-35-44
10 ppb		1	axc2	1/18/2010 12:42:34	OM_1-18-2010_12-35-44
CRDL 5.0 ppb		1	axc2	1/18/2010 12:43:27	OM_1-18-2010_12-35-44
ICAL-00		1	axc2	1/18/2010 12:44:21	OM_1-18-2010_12-35-44
ICV		1	axc2	1/18/2010 12:46:12	OM_1-18-2010_12-35-44
ICB		1	axc2	1/18/2010 12:48:02	OM_1-18-2010_12-35-44
CRDL		1	axc2	1/18/2010 12:49:52	OM_1-18-2010_12-35-44
1202013064	940627	1	axc2	1/18/2010 12:51:41	OM_1-18-2010_12-35-44
1202013071	940627	1	axc2	1/18/2010 12:52:35	OM_1-18-2010_12-35-44
244226001	940627	1	axc2	1/18/2010 12:53:28	OM_1-18-2010_12-35-44
1202013065	940627	1	axc2	1/18/2010 12:54:21	OM_1-18-2010_12-35-44
1202013067	940627	1	axc2	1/18/2010 12:55:14	OM_1-18-2010_12-35-44
1202013069	940627	1	axc2	1/18/2010 12:56:07	OM_1-18-2010_12-35-44
244226002	940627	1	axc2	1/18/2010 12:57:00	OM_1-18-2010_12-35-44
244236001	940627	1	axc2	1/18/2010 12:57:52	OM_1-18-2010_12-35-44
1202013066	940627	1	axc2	1/18/2010 12:58:45	OM_1-18-2010_12-35-44
1202013068	940627	1	axc2	1/18/2010 12:59:37	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:00:29	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:02:19	OM_1-18-2010_12-35-44
1202013070	940627	1	axc2	1/18/2010 13:04:08	OM_1-18-2010_12-35-44
244236004	940627	1	axc2	1/18/2010 13:05:00	OM_1-18-2010_12-35-44
244240002	940627	1	axc2	1/18/2010 13:05:51	OM_1-18-2010_12-35-44
244243001	940627	1	axc2	1/18/2010 13:06:43	OM_1-18-2010_12-35-44
244243002	940627	1	axc2	1/18/2010 13:07:35	OM_1-18-2010_12-35-44
244243003	940627	1	axc2	1/18/2010 13:08:28	OM_1-18-2010_12-35-44
244243004	940627	1	axc2	1/18/2010 13:09:22	OM_1-18-2010_12-35-44
244516001	940627	1	axc2	1/18/2010 13:10:16	OM_1-18-2010_12-35-44
244516002	940627	1	axc2	1/18/2010 13:11:09	OM_1-18-2010_12-35-44
244523001	940627	1	axc2	1/18/2010 13:12:02	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:12:54	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:14:44	OM_1-18-2010_12-35-44
244525001	940627	1	axc2	1/18/2010 13:16:33	OM_1-18-2010_12-35-44
244525003	940627	1	axc2	1/18/2010 13:17:26	OM_1-18-2010_12-35-44
244532001	940627	1	axc2	1/18/2010 13:18:19	OM_1-18-2010_12-35-44
244537001	940627	1	axc2	1/18/2010 13:19:11	OM_1-18-2010_12-35-44
244574001	940627	1	axc2	1/18/2010 13:20:04	OM_1-18-2010_12-35-44
244580001	940627	1	axc2	1/18/2010 13:20:56	OM_1-18-2010_12-35-44
244583001	940627	1	axc2	1/18/2010 13:21:49	OM_1-18-2010_12-35-44
244609005	940627	1	axc2	1/18/2010 13:22:40	OM_1-18-2010_12-35-44
1202016420	941969	1	axc2	1/18/2010 13:23:32	OM_1-18-2010_12-35-44
1202016427	941969	25	axc2	1/18/2010 13:24:24	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:25:17	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:27:07	OM_1-18-2010_12-35-44
244622003	941969	1	axc2	1/18/2010 13:28:58	OM_1-18-2010_12-35-44
1202016421	941969	1	axc2	1/18/2010 13:29:52	OM_1-18-2010_12-35-44
1202016423	941969	1	axc2	1/18/2010 13:30:45	OM_1-18-2010_12-35-44
1202016425	941969	1	axc2	1/18/2010 13:31:38	OM_1-18-2010_12-35-44
244622004	941969	1	axc2	1/18/2010 13:32:31	OM_1-18-2010_12-35-44
244622005	941969	1	axc2	1/18/2010 13:33:24	OM_1-18-2010_12-35-44
244622006	941969	1	axc2	1/18/2010 13:34:17	OM_1-18-2010_12-35-44
244622007	941969	1	axc2	1/18/2010 13:35:10	OM_1-18-2010_12-35-44
244622008	941969	1	axc2	1/18/2010 13:36:04	OM_1-18-2010_12-35-44
244768001	941969	1	axc2	1/18/2010 13:36:56	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:37:49	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:39:38	OM_1-18-2010_12-35-44

244768002	941969	1	axc2	1/18/2010	13:41:27	OM_1-18-2010_12-35-44
244768003	941969	1	axc2	1/18/2010	13:42:19	OM_1-18-2010_12-35-44
244768004	941969	1	axc2	1/18/2010	13:43:12	OM_1-18-2010_12-35-44
244768005	941969	1	axc2	1/18/2010	13:44:03	OM_1-18-2010_12-35-44
244768006	941969	1	axc2	1/18/2010	13:44:55	OM_1-18-2010_12-35-44
244768007	941969	1	axc2	1/18/2010	13:45:50	OM_1-18-2010_12-35-44
244768008	941969	1	axc2	1/18/2010	13:46:44	OM_1-18-2010_12-35-44
244768009	941969	1	axc2	1/18/2010	13:47:37	OM_1-18-2010_12-35-44
244768010	941969	1	axc2	1/18/2010	13:48:31	OM_1-18-2010_12-35-44
244773001	941969	1	axc2	1/18/2010	13:49:24	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	13:50:17	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	13:52:07	OM_1-18-2010_12-35-44
1202016422	941969	1	axc2	1/18/2010	13:53:57	OM_1-18-2010_12-35-44
1202016424	941969	1	axc2	1/18/2010	13:54:50	OM_1-18-2010_12-35-44
1202016426	941969	1	axc2	1/18/2010	13:55:43	OM_1-18-2010_12-35-44
244773002	941969	1	axc2	1/18/2010	13:56:36	OM_1-18-2010_12-35-44
244773003	941969	1	axc2	1/18/2010	13:57:28	OM_1-18-2010_12-35-44
244773004	941969	1	axc2	1/18/2010	13:58:21	OM_1-18-2010_12-35-44
244609005	940627	5	axc2	1/18/2010	13:59:14	OM_1-18-2010_12-35-44
1202017519	942453	1	axc2	1/18/2010	14:00:07	OM_1-18-2010_12-35-44
1202017520	942453	1	axc2	1/18/2010	14:01:01	OM_1-18-2010_12-35-44
1202017521	942453	1	axc2	1/18/2010	14:01:56	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:02:47	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:04:37	OM_1-18-2010_12-35-44
244810001	942453	1	axc2	1/18/2010	14:06:27	OM_1-18-2010_12-35-44
1202012091*	940249	1	axc2	1/18/2010	14:07:21	OM_1-18-2010_12-35-44
1202012098*	940249	25	axc2	1/18/2010	14:08:12	OM_1-18-2010_12-35-44
244228002	940249	1	axc2	1/18/2010	14:09:04	OM_1-18-2010_12-35-44
1202012096	940249	1	axc2	1/18/2010	14:09:56	OM_1-18-2010_12-35-44
1202012094	940249	1	axc2	1/18/2010	14:10:51	OM_1-18-2010_12-35-44
1202012092	940249	1	axc2	1/18/2010	14:11:45	OM_1-18-2010_12-35-44
244228003	940249	1	axc2	1/18/2010	14:12:39	OM_1-18-2010_12-35-44
1202012093	940249	1	axc2	1/18/2010	14:13:33	OM_1-18-2010_12-35-44
1202012095	940249	1	axc2	1/18/2010	14:14:26	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:15:18	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:17:09	OM_1-18-2010_12-35-44
1202012091	940249	1	axc2	1/18/2010	14:18:58	OM_1-18-2010_12-35-44
1202012098	940249	25	axc2	1/18/2010	14:19:51	OM_1-18-2010_12-35-44
1202012097	940249	1	axc2	1/18/2010	14:20:44	OM_1-18-2010_12-35-44
244228004	940249	1	axc2	1/18/2010	14:21:37	OM_1-18-2010_12-35-44
244228005	940249	1	axc2	1/18/2010	14:22:30	OM_1-18-2010_12-35-44
244228006	940249	1	axc2	1/18/2010	14:23:23	OM_1-18-2010_12-35-44
244242001	940249	1	axc2	1/18/2010	14:24:17	OM_1-18-2010_12-35-44
244242002	940249	1	axc2	1/18/2010	14:25:09	OM_1-18-2010_12-35-44
244242003	940249	1	axc2	1/18/2010	14:26:02	OM_1-18-2010_12-35-44
244242004	940249	1	axc2	1/18/2010	14:26:54	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:27:47	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:29:37	OM_1-18-2010_12-35-44
244242005	940249	1	axc2	1/18/2010	14:31:26	OM_1-18-2010_12-35-44
244242006	940249	1	axc2	1/18/2010	14:32:18	OM_1-18-2010_12-35-44
244242007	940249	1	axc2	1/18/2010	14:33:12	OM_1-18-2010_12-35-44
244242008	940249	1	axc2	1/18/2010	14:34:06	OM_1-18-2010_12-35-44
244242009	940249	1	axc2	1/18/2010	14:35:01	OM_1-18-2010_12-35-44
244242010	940249	1	axc2	1/18/2010	14:35:55	OM_1-18-2010_12-35-44
244242011	940249	1	axc2	1/18/2010	14:36:48	OM_1-18-2010_12-35-44
244242012	940249	1	axc2	1/18/2010	14:37:42	OM_1-18-2010_12-35-44
244242013	940249	1	axc2	1/18/2010	14:38:36	OM_1-18-2010_12-35-44
244242014	940249	1	axc2	1/18/2010	14:39:29	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:40:21	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:42:12	OM_1-18-2010_12-35-44

1202012065	940244	1	axc2	1/18/2010	14:44:01	OM_1-18-2010_12-35-44
1202012072	940244	25	axc2	1/18/2010	14:44:54	OM_1-18-2010_12-35-44
244139009	940244	1	axc2	1/18/2010	14:45:47	OM_1-18-2010_12-35-44
1202012066	940244	1	axc2	1/18/2010	14:46:40	OM_1-18-2010_12-35-44
1202012068	940244	1	axc2	1/18/2010	14:47:32	OM_1-18-2010_12-35-44
1202012070	940244	1	axc2	1/18/2010	14:48:25	OM_1-18-2010_12-35-44
244139010	940244	1	axc2	1/18/2010	14:49:18	OM_1-18-2010_12-35-44
1202012067	940244	1	axc2	1/18/2010	14:50:12	OM_1-18-2010_12-35-44
1202012069	940244	1	axc2	1/18/2010	14:51:07	OM_1-18-2010_12-35-44
1202012071	940244	1	axc2	1/18/2010	14:52:01	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:52:53	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:54:43	OM_1-18-2010_12-35-44
244139011	940244	1	axc2	1/18/2010	14:56:34	OM_1-18-2010_12-35-44
244139012	940244	1	axc2	1/18/2010	14:57:28	OM_1-18-2010_12-35-44
244227001	940244	1	axc2	1/18/2010	14:58:22	OM_1-18-2010_12-35-44
244227002	940244	1	axc2	1/18/2010	14:59:16	OM_1-18-2010_12-35-44
244227003	940244	1	axc2	1/18/2010	15:00:09	OM_1-18-2010_12-35-44
244227004	940244	1	axc2	1/18/2010	15:01:03	OM_1-18-2010_12-35-44
244227005	940244	1	axc2	1/18/2010	15:01:56	OM_1-18-2010_12-35-44
244227006	940244	1	axc2	1/18/2010	15:02:50	OM_1-18-2010_12-35-44
244227007	940244	1	axc2	1/18/2010	15:03:43	OM_1-18-2010_12-35-44
244227008	940244	1	axc2	1/18/2010	15:04:35	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	15:05:28	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	15:07:18	OM_1-18-2010_12-35-44
244227009	940244	1	axc2	1/18/2010	15:09:08	OM_1-18-2010_12-35-44
244227010	940244	1	axc2	1/18/2010	15:10:00	OM_1-18-2010_12-35-44
244227011	940244	1	axc2	1/18/2010	15:10:55	OM_1-18-2010_12-35-44
244227012	940244	1	axc2	1/18/2010	15:11:50	OM_1-18-2010_12-35-44
244227013	940244	1	axc2	1/18/2010	15:12:44	OM_1-18-2010_12-35-44
244227014	940244	1	axc2	1/18/2010	15:13:38	OM_1-18-2010_12-35-44
244227015	940244	1	axc2	1/18/2010	15:14:33	OM_1-18-2010_12-35-44
244228001	940244	1	axc2	1/18/2010	15:15:27	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	15:16:19	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	15:18:10	OM_1-18-2010_12-35-44

Author: axc2

Date : 1/19/2010

Original Run Filename: OM_1-18-2010_12-35-44.OMN created 1/18/2010 12:35:44
Original Run Author's Signature: [axc2]
Current Run Filename: OM_1-18-2010_12-35-44.OMN last modified 1/18/2010 15:19:15
Current Run Author's Signature: [axc2]
Description: GL-GC-E-102 EPA 420.4, 9066
LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100118-01	1	S1	200	6.39	1/18/2010@12:39:03			200 ppb
WCN100118-02	1	S2	150	4.99	1/18/2010@12:39:55			150 ppb
WCN100118-03	1	S3	100	3.39	1/18/2010@12:40:48			100 ppb
WCN100118-04	1	S4	50.0	1.78	1/18/2010@12:41:40			50 ppb
WCN100118-05	1	S5	10.0	0.425	1/18/2010@12:42:34			10 ppb
WCN100118-06	1	S6	5.00	0.276	1/18/2010@12:43:27			CRDL 5.0 ppb
WCN100118-08	1	S7	0.00	0.0116	1/18/2010@12:44:21			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99944 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN100118-07	1	S8	156	5.09	1/18/2010@12:46:12			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	3.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.54	-0.00105	1/18/2010@12:48:02			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.54 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.54 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN100118-06	1	S6	4.85	0.267	1/18/2010@12:49:52			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.85 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.85 > 2.50					
		Message	Pass					
		Action	None					
1202013064|940627|MB	1	1	-2.14	0.0438	1/18/2010@12:51:41			
1202013071||LCS	1	2	53.9	1.84	1/18/2010@12:52:35			
244226001	1	3	-2.70	0.0257	1/18/2010@12:53:28			
1202013065||DUP	1	4	-2.50	0.0320	1/18/2010@12:54:21			
1202013067||MS	1	5	99.5	3.30	1/18/2010@12:55:14			
1202013069||MSD	1	6	108	3.56	1/18/2010@12:56:07			
244226002	1	7	-2.72	0.0251	1/18/2010@12:57:00			
244236001	1	8	-2.86	0.0207	1/18/2010@12:57:52			
1202013066||DUP	1	9	-2.28	0.0393	1/18/2010@12:58:45			
1202013068||MS	1	10	105	3.46	1/18/2010@12:59:37			
WCN100118-03	1	S3	109	3.59	1/18/2010@13:00:29			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					

DQM Test: < - Percent Relative Difference								
		Result:	8.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-2.87	0.0203	1/18/2010@13:02:19			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.87 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.87 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202013070||MSD	1	11	105	3.49	1/18/2010@13:04:08			
244236004	1	12	-2.08	0.0457	1/18/2010@13:05:00			
244240002	1	13	-3.50	-8.65e-6	1/18/2010@13:05:51			
244243001	1	14	-3.66	-0.00508	1/18/2010@13:06:43			
244243002	1	15	-2.84	0.0212	1/18/2010@13:07:35			
244243003	1	16	-2.79	0.0230	1/18/2010@13:08:28			
244243004	1	17	-2.27	0.0396	1/18/2010@13:09:22			
244516001	1	18	-2.40	0.0353	1/18/2010@13:10:16			
244516002	1	19	-2.08	0.0457	1/18/2010@13:11:09			
244523001	1	20	-3.86	-0.0114	1/18/2010@13:12:02			
WCN100118-03	1	S3	109	3.60	1/18/2010@13:12:54			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-4.31	-0.0257	1/18/2010@13:14:44			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-4.31 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-4.31 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244525001	1	21	-2.34	0.0371	1/18/2010@13:16:33			
244525003	1	22	-2.43	0.0342	1/18/2010@13:17:26			
244532001	1	23	7.91	0.365	1/18/2010@13:18:19			
244537001	1	24	-1.03	0.0790	1/18/2010@13:19:11			
244574001	1	25	-0.528	0.0952	1/18/2010@13:20:04			
244580001	1	26	-1.41	0.0669	1/18/2010@13:20:56			
244583001	1	27	10.8	0.459	1/18/2010@13:21:49			
244609005	1	28	328	10.6	1/18/2010@13:22:40			
1202016420|941969|MB	1	29	-1.71	0.0574	1/18/2010@13:23:32			
1202016427||LCS	1	30	27.2	0.982	1/18/2010@13:24:24		25.00	
WCN100118-03	1	S3	109	3.59	1/18/2010@13:25:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-1.95	0.0499	1/18/2010@13:27:07			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.95 < 5.00					

		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.95 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244622003	1	31	-1.57	0.0620	1/18/2010@13:28:58			
1202016421||DUP	1	32	-2.30	0.0384	1/18/2010@13:29:52			
1202016423||MS	1	33	102	3.36	1/18/2010@13:30:45			
1202016425||MSD	1	34	105	3.46	1/18/2010@13:31:38			
244622004	1	35	-2.58	0.0297	1/18/2010@13:32:31			
244622005	1	36	-2.62	0.0283	1/18/2010@13:33:24			
244622006	1	37	-2.32	0.0379	1/18/2010@13:34:17			
244622007	1	38	-2.27	0.0394	1/18/2010@13:35:10			
244622008	1	39	-1.49	0.0644	1/18/2010@13:36:04			
244768001	1	40	5.61	0.292	1/18/2010@13:36:56			
WCN100118-03	1	S3	108	3.58	1/18/2010@13:37:49			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	8.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	8.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.50	-1.72e-6	1/18/2010@13:39:38			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-3.50 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-3.50 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244768002	1	41	-2.73	0.0249	1/18/2010@13:41:27			
244768003	1	42	-2.84	0.0214	1/18/2010@13:42:19			
244768004	1	43	-2.54	0.0309	1/18/2010@13:43:12			
244768005	1	44	-1.22	0.0731	1/18/2010@13:44:03			
244768006	1	45	-2.45	0.0337	1/18/2010@13:44:55			
244768007	1	46	-2.55	0.0307	1/18/2010@13:45:50			
244768008	1	47	-2.10	0.0449	1/18/2010@13:46:44			
244768009	1	48	-1.29	0.0708	1/18/2010@13:47:37			
244768010	1	49	-1.30	0.0706	1/18/2010@13:48:31			
244773001	1	50	-2.37	0.0364	1/18/2010@13:49:24			
WCN100118-03	1	S3	108	3.56	1/18/2010@13:50:17			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	7.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	7.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.12	0.0122	1/18/2010@13:52:07			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-3.12 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-3.12 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202016422||DUP	1	51	-2.60	0.0290	1/18/2010@13:53:57			
1202016424||MS	1	52	93.1	3.09	1/18/2010@13:54:50			

1202016426||MSD	1	53	95.7	3.18	1/18/2010@13:55:43			
244773002	1	54	-2.43	0.0343	1/18/2010@13:56:36			
244773003	1	55	-1.87	0.0522	1/18/2010@13:57:28			
244773004	1	56	-2.08	0.0457	1/18/2010@13:58:21			
244609005|940627|	1	28	60.8	2.06	1/18/2010@13:59:14		5.00	
1202017519|942453|MB	1	112	-2.32	0.0378	1/18/2010@14:00:07			
1202017520||LCS	1	113	-2.48	0.0329	1/18/2010@14:01:01			
1202017521||LCSD	1	114	-3.68	-0.00553	1/18/2010@14:01:56			
WCN100118-03	1	S3	107	3.55	1/18/2010@14:02:47			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.63	-0.00401	1/18/2010@14:04:37			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.63 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.63 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244810001	1	115	162	5.31	1/18/2010@14:06:27			
1202012091|940249|MB	1	57	615	19.8	1/18/2010@14:07:21			
1202012098||LCS	1	58	-1.60	0.0610	1/18/2010@14:08:12		25.00	
244228002	1	59	0.0437	0.114	1/18/2010@14:09:04			
1202012096||MSD	1	60	90.3	3.00	1/18/2010@14:09:56			
1202012094||MS	1	61	83.7	2.79	1/18/2010@14:10:51			
1202012092||DUP	1	62	-0.800	0.0865	1/18/2010@14:11:45			
244228003	1	63	-2.62	0.0284	1/18/2010@14:12:39			
1202012093||DUP	1	64	-2.57	0.0299	1/18/2010@14:13:33			
1202012095||MS	1	65	96.3	3.19	1/18/2010@14:14:26			
WCN100118-03	1	S3	108	3.57	1/18/2010@14:15:18			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.71	-0.00665	1/18/2010@14:17:09			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.71 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.71 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202012091||MB	1	57	-3.73	-0.00710	1/18/2010@14:18:58			
1202012098||LCS	1	58	27.7	0.999	1/18/2010@14:19:51		25.00	
1202012097||MSD	1	66	99.3	3.29	1/18/2010@14:20:44			
244228004	1	67	-1.50	0.0642	1/18/2010@14:21:37			
244228005	1	68	-1.84	0.0532	1/18/2010@14:22:30			
244228006	1	69	-0.258	0.104	1/18/2010@14:23:23			
244242001	1	70	-2.38	0.0359	1/18/2010@14:24:17			
244242002	1	71	0.545	0.130	1/18/2010@14:25:09			
244242003	1	72	-2.36	0.0365	1/18/2010@14:26:02			
244242004	1	73	-2.40	0.0354	1/18/2010@14:26:54			

WCN100118-03	1	S3	107	3.54	1/18/2010@14:27:47			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.74	-0.00766	1/18/2010@14:29:37			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.74 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.74 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244242005	1	74	-2.53	0.0310	1/18/2010@14:31:26			
244242006	1	75	-2.02	0.0476	1/18/2010@14:32:18			
244242007	1	76	-1.48	0.0646	1/18/2010@14:33:12			
244242008	1	77	-0.969	0.0811	1/18/2010@14:34:06			
244242009	1	78	1.92	0.173	1/18/2010@14:35:01			
244242010	1	79	-0.972	0.0810	1/18/2010@14:35:55			
244242011	1	80	2.46	0.191	1/18/2010@14:36:48			
244242012	1	81	-2.33	0.0374	1/18/2010@14:37:42			
244242013	1	82	-1.94	0.0501	1/18/2010@14:38:36			
244242014	1	83	-4.40	-0.0288	1/18/2010@14:39:29			
WCN100118-03	1	S3	105	3.48	1/18/2010@14:40:21			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.70	-0.00617	1/18/2010@14:42:12			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.70 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.70 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202012065|940244|MB	1	84	-1.88	0.0518	1/18/2010@14:44:01			
1202012072||LCS	1	85	28.4	1.02	1/18/2010@14:44:54		25.00	
244139009	1	86	-2.18	0.0422	1/18/2010@14:45:47			
1202012066||DUP	1	87	-1.68	0.0582	1/18/2010@14:46:40			
1202012068||MS	1	88	109	3.61	1/18/2010@14:47:32			
1202012070||MSD	1	89	92.7	3.08	1/18/2010@14:48:25			
244139010	1	90	-1.82	0.0540	1/18/2010@14:49:18			
1202012067||DUP	1	91	-2.24	0.0405	1/18/2010@14:50:12			
1202012069||MS	1	92	103	3.41	1/18/2010@14:51:07			
1202012071||MSD	1	93	111	3.67	1/18/2010@14:52:01			
WCN100118-03	1	S3	107	3.55	1/18/2010@14:52:53			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.4 < 10.0					

		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.08	0.0137	1/18/2010@14:54:43			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.08 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.08 > -5.00					
		Message	CCB Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
244139011	1	94	-1.12	0.0764	1/18/2010@14:56:34			
244139012	1	95	-4.10	-0.0191	1/18/2010@14:57:28			
244227001	1	96	-2.47	0.0332	1/18/2010@14:58:22			
244227002	1	97	-2.52	0.0315	1/18/2010@14:59:16			
244227003	1	98	-3.51	-3.03e-4	1/18/2010@15:00:09			
244227004	1	99	-1.79	0.0547	1/18/2010@15:01:03			
244227005	1	100	-1.73	0.0568	1/18/2010@15:01:56			
244227006	1	101	-2.49	0.0323	1/18/2010@15:02:50			
244227007	1	102	9.40	0.413	1/18/2010@15:03:43			
244227008	1	103	-0.858	0.0847	1/18/2010@15:04:35			
WCN100118-03	1	S3	106	3.50	1/18/2010@15:05:28			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-2.72	0.0249	1/18/2010@15:07:18			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.72 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.72 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244227009	1	104	-0.336	0.101	1/18/2010@15:09:08			
244227010	1	105	-2.18	0.0424	1/18/2010@15:10:00			
244227011	1	106	-1.74	0.0564	1/18/2010@15:10:55			
244227012	1	107	-2.46	0.0332	1/18/2010@15:11:50			
244227013	1	108	-1.71	0.0574	1/18/2010@15:12:44			
244227014	1	109	-2.04	0.0468	1/18/2010@15:13:38			
244227015	1	110	-0.817	0.0860	1/18/2010@15:14:33			
244228001	1	111	-3.51	-3.21e-4	1/18/2010@15:15:27			
WCN100118-03	1	S3	105	3.48	1/18/2010@15:16:19			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.64	-0.00439	1/18/2010@15:18:10			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.64 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								

Author: axc2

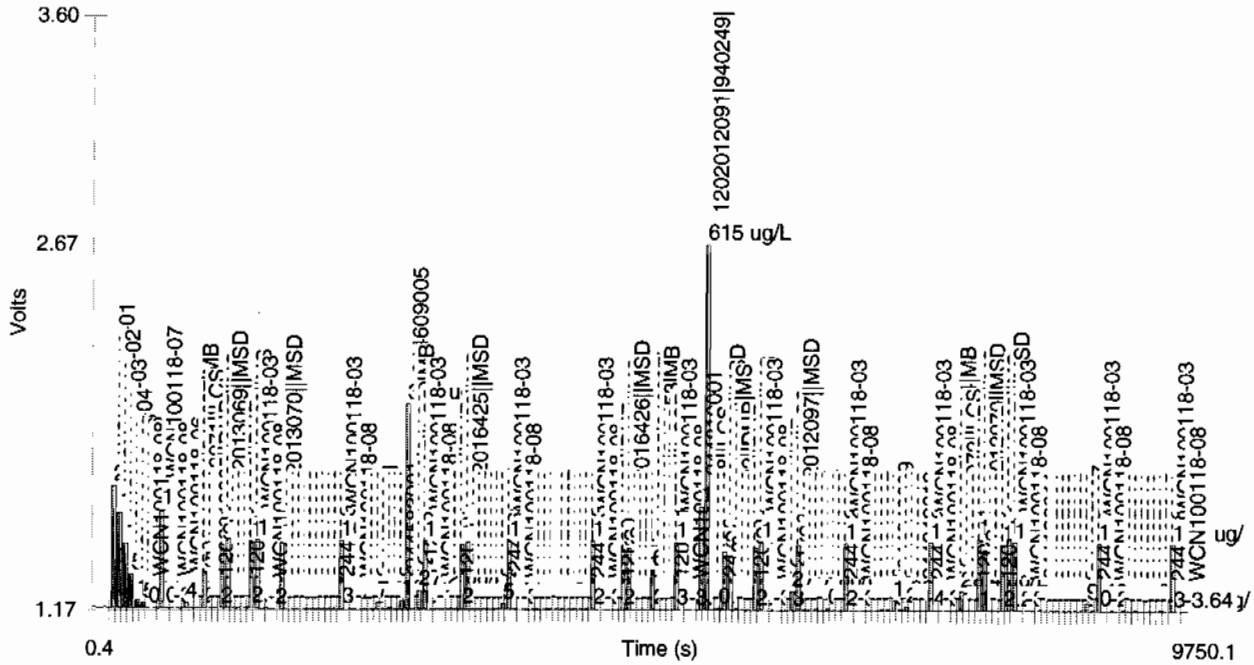
Date : 1/19/2010

Result:	-3.64 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_1-18-2010_12-35-44.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View



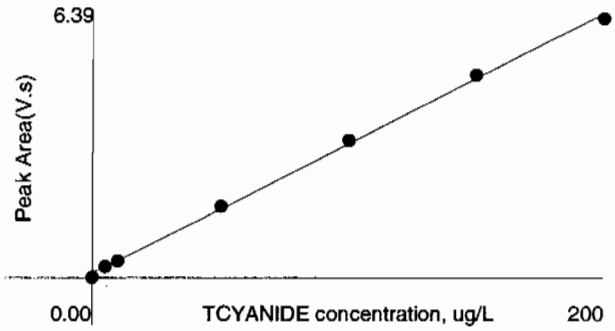
Author: axc2

Date : 1/19/2010

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.39	0.494	1.8	1/18/2010	12:40:06
2	150	1	4.99	0.384	-1.7	1/18/2010	12:40:58
3	100	1	3.39	0.261	-2.5	1/18/2010	12:41:50
4	50.0	1	1.78	0.137	-3.8	1/18/2010	12:42:43
5	10.0	1	0.425	0.0315	2.3	1/18/2010	12:43:37
6	5.00	1	0.276	0.0199	-0.6	1/18/2010	12:44:30
7	0.00	1	0.0116	3.98e-4		1/18/2010	12:45:24

Figure 1: TCYANIDE



Area = 0.0320 * Conc + 0.115
Conc = 31.2 * Area - 3.50
Correlation Coefficient (r) = 0.99944

No Weighting

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1161-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	940244	**Method:**	SW9012A Cyanide and Total
Prep Batch :	940240	**Method:**	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
244227001	RE12-10-7734
244227002	RE12-10-7701
244227003	RE12-10-7702
244227004	RE12-10-7700
244227005	RE12-10-7699
244227006	RE12-10-7727
244227007	RE12-10-7710
244227008	RE12-10-7715
244227009	RE12-10-7707
244227010	RE12-10-7719
244227011	RE12-10-7717
244227012	RE12-10-7708
244227013	RE12-10-7706
244227014	RE12-10-7714
244227015	RE12-10-7705
1202012065	Method Blank (MB)
1202012066	244139009(RE52-10-9528) Sample Duplicate (DUP)
1202012067	244139010(RE52-10-9530) Sample Duplicate (DUP)
1202012068	244139009(RE52-10-9528) Matrix Spike (MS)
1202012069	244139010(RE52-10-9530) Matrix Spike (MS)
1202012070	244139009(RE52-10-9528) Matrix Spike Duplicate (MSD)
1202012071	244139010(RE52-10-9530) Matrix Spike Duplicate (MSD)
1202012072	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 244139009 (RE52-10-9528) and 244139010 (RE52-10-9530).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202012066 (RE52-10-9528).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration: 1202012072 (LCS).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Data Exception (DER) Documentation
A DER was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 02Feb10

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1161-1 GEL Work Order: 244227

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Tom Lewis, Jr.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7719	Project:	LANL01004
Sample ID:	244227010	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	16.6%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND	81.6	300	ug/kg	1	AXC2	01/18/10	1510	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7717	Project:	LANL01004
Sample ID:	244227011	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	18.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	83.2	306	ug/kg	1	AXC2 01/18/10	1510	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7708	Project:	LANL01004
Sample ID:	244227012	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	3.21%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	63.9	235	ug/kg	1	AXC2 01/18/10	1511	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7706	Project:	LANL01004
Sample ID:	244227013	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	10.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.9	268	ug/kg	1	AXC2 01/18/10	1512	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

GEL LABORATORIES LLC

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Certificate of Analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7714	Project:	LANL01004
Sample ID:	244227014	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	9.61%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	67.2	247	ug/kg	1	AXC2 01/18/10	1513	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7705	Project:	LANL01004
Sample ID:	244227015	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	16.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	78.0	287	ug/kg	1	AXC2 01/18/10	1514	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7734	Project:	LANL01004
Sample ID:	244227001	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	6.55%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.8	268	ug/kg	1	AXC2 01/18/10	1458	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0836	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7701	Project:	LANL01004
Sample ID:	244227002	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	25.6%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	91.4	336	ug/kg	1	AXC2 01/18/10	1459	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7702	Project:	LANL01004
Sample ID:	244227003	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	15%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	80.0	294	ug/kg	1	AXC2 01/18/10	1500	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7700	Project:	LANL01004
Sample ID:	244227004	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	6.34%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.6	267	ug/kg	1	AXC2 01/18/10	1501	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7699	Project:	LANL01004
Sample ID:	244227005	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	20.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	85.5	314	ug/kg	1	AXC2 01/18/10	1501	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7727	Project:	LANL01004
Sample ID:	244227006	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	25.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total	U	ND	91.0	335	ug/kg	1	AXC2	01/18/10	1502	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7710	Project:	LANL01004
Sample ID:	244227007	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	6.38%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
SW9012A Cyanide, Total "Dry Weight Corrected"											
Cyanide, Total		502	72.6	267	ug/kg	1	AXC2	01/18/10	1503	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7715	Project:	LANL01004
Sample ID:	244227008	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	26%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	91.8	338	ug/kg	1	AXC2 01/18/10	1504	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 2, 2010

Client SDG: 10-1161-1

Client Sample ID:	RE12-10-7707	Project:	LANL01004
Sample ID:	244227009	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	21.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	86.5	318	ug/kg	1	AXC2 01/18/10	1509	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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QC Summary

Report Date: February 2, 2010
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 244227

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 940244											
QC1202012066 244139009 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	01/18/10 14:46
QC1202012067 244139010 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A				01/18/10 14:50
QC1202012072 LCS											
Cyanide, Total	67900				71000	ug/kg		105	(46%-145%)		01/18/10 14:44
QC1202012065 MB											
Cyanide, Total				U	250	ug/kg					01/18/10 14:44
QC1202012068 244139009 MS											
Cyanide, Total	5170	U	ND		5630	ug/kg		109	(50%-130%)		01/18/10 14:47
QC1202012069 244139010 MS											
Cyanide, Total	5360	U	ND		5520	ug/kg		103	(50%-130%)		01/18/10 14:51
QC1202012070 244139009 MSD											
Cyanide, Total	5170	U	ND		4790	ug/kg	16.2	92.7	(0%-30%)		01/18/10 14:48
QC1202012071 244139010 MSD											
Cyanide, Total	5890	U	ND		6540	ug/kg	17.0	111	(0%-30%)		01/18/10 14:52

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based

QC Summary

Workorder: 244227

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

on nearest internal standard response factor

N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 02-FEB-2010 17:28

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1161-1

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**18-JAN-2010 12:46:12**	**OM_1-18-2010_12-35-44**	**156**	**150**	**104**	**(90%-110%)**	**Yes**
CCV	18-JAN-2010 14:40:21	OM_1-18-2010_12-35-44	105	100	105	(90%-110%)	Yes
CCV	18-JAN-2010 14:52:53	OM_1-18-2010_12-35-44	107	100	107	(90%-110%)	Yes
CCV	18-JAN-2010 15:05:28	OM_1-18-2010_12-35-44	106	100	106	(90%-110%)	Yes
CCV	18-JAN-2010 15:16:19	OM_1-18-2010_12-35-44	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**18-JAN-2010 12:48:02**	**OM_1-18-2010_12-35-44**	**-3.54**	**5**	**Yes**
CCB	18-JAN-2010 14:42:12	OM_1-18-2010_12-35-44	-3.7	5	Yes
CCB	18-JAN-2010 14:54:43	OM_1-18-2010_12-35-44	-3.08	5	Yes
CCB	18-JAN-2010 15:07:18	OM_1-18-2010_12-35-44	-2.72	5	Yes
CCB	18-JAN-2010 15:18:10	OM_1-18-2010_12-35-44	-3.64	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 940240

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202012072	URF1200957-01	.25	g
MS	1202012068	URF1184831-02	.025	mL
MS	1202012069	URF1184831-02	.025	mL
MSD	1202012070	URF1184831-02	.025	mL
MSD	1202012071	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202012065		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.5 g	25 mL	50	SOIL
LCS	1202012072		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.25 g	25 mL	100	SOIL
SAMPLE	244139009		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.5 g	25 mL	50	SOIL
DUP	1202012066	244139009	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.53 g	25 mL	47.16981	SOIL
MS	1202012068	244139009	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1202012070	244139009	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	244139010		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.54 g	25 mL	46.2963	SOIL
DUP	1202012067	244139010	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.55 g	25 mL	45.45455	SOIL
MS	1202012069	244139010	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.55 g	25 mL	45.45455	SOIL
MSD	1202012071	244139010	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244139011		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	244139012		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227001		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227002		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227003		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227004		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227005		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227006		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227007		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227008		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227009		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227010		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227011		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227012		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	244227013		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	244227014		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	244227015		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	244228001		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.56 g	25 mL	44.64286	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN100114-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1238146-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1238142-C	1.25 mL	Bismuth Nitrate Solution

Comments

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	1/18/2010 12:39:03	OM_1-18-2010_12-35-44
150 ppb		1	axc2	1/18/2010 12:39:55	OM_1-18-2010_12-35-44
100 ppb		1	axc2	1/18/2010 12:40:48	OM_1-18-2010_12-35-44
50 ppb		1	axc2	1/18/2010 12:41:40	OM_1-18-2010_12-35-44
10 ppb		1	axc2	1/18/2010 12:42:34	OM_1-18-2010_12-35-44
CRDL 5.0 ppb		1	axc2	1/18/2010 12:43:27	OM_1-18-2010_12-35-44
ICAL-00		1	axc2	1/18/2010 12:44:21	OM_1-18-2010_12-35-44
ICV		1	axc2	1/18/2010 12:46:12	OM_1-18-2010_12-35-44
ICB		1	axc2	1/18/2010 12:48:02	OM_1-18-2010_12-35-44
CRDL		1	axc2	1/18/2010 12:49:52	OM_1-18-2010_12-35-44
1202013064	940627	1	axc2	1/18/2010 12:51:41	OM_1-18-2010_12-35-44
1202013071	940627	1	axc2	1/18/2010 12:52:35	OM_1-18-2010_12-35-44
244226001	940627	1	axc2	1/18/2010 12:53:28	OM_1-18-2010_12-35-44
1202013065	940627	1	axc2	1/18/2010 12:54:21	OM_1-18-2010_12-35-44
1202013067	940627	1	axc2	1/18/2010 12:55:14	OM_1-18-2010_12-35-44
1202013069	940627	1	axc2	1/18/2010 12:56:07	OM_1-18-2010_12-35-44
244226002	940627	1	axc2	1/18/2010 12:57:00	OM_1-18-2010_12-35-44
244236001	940627	1	axc2	1/18/2010 12:57:52	OM_1-18-2010_12-35-44
1202013066	940627	1	axc2	1/18/2010 12:58:45	OM_1-18-2010_12-35-44
1202013068	940627	1	axc2	1/18/2010 12:59:37	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:00:29	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:02:19	OM_1-18-2010_12-35-44
1202013070	940627	1	axc2	1/18/2010 13:04:08	OM_1-18-2010_12-35-44
244236004	940627	1	axc2	1/18/2010 13:05:00	OM_1-18-2010_12-35-44
244240002	940627	1	axc2	1/18/2010 13:05:51	OM_1-18-2010_12-35-44
244243001	940627	1	axc2	1/18/2010 13:06:43	OM_1-18-2010_12-35-44
244243002	940627	1	axc2	1/18/2010 13:07:35	OM_1-18-2010_12-35-44
244243003	940627	1	axc2	1/18/2010 13:08:28	OM_1-18-2010_12-35-44
244243004	940627	1	axc2	1/18/2010 13:09:22	OM_1-18-2010_12-35-44
244516001	940627	1	axc2	1/18/2010 13:10:16	OM_1-18-2010_12-35-44
244516002	940627	1	axc2	1/18/2010 13:11:09	OM_1-18-2010_12-35-44
244523001	940627	1	axc2	1/18/2010 13:12:02	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:12:54	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:14:44	OM_1-18-2010_12-35-44
244525001	940627	1	axc2	1/18/2010 13:16:33	OM_1-18-2010_12-35-44
244525003	940627	1	axc2	1/18/2010 13:17:26	OM_1-18-2010_12-35-44
244532001	940627	1	axc2	1/18/2010 13:18:19	OM_1-18-2010_12-35-44
244537001	940627	1	axc2	1/18/2010 13:19:11	OM_1-18-2010_12-35-44
244574001	940627	1	axc2	1/18/2010 13:20:04	OM_1-18-2010_12-35-44
244580001	940627	1	axc2	1/18/2010 13:20:56	OM_1-18-2010_12-35-44
244583001	940627	1	axc2	1/18/2010 13:21:49	OM_1-18-2010_12-35-44
244609005	940627	1	axc2	1/18/2010 13:22:40	OM_1-18-2010_12-35-44
1202016420	941969	1	axc2	1/18/2010 13:23:32	OM_1-18-2010_12-35-44
1202016427	941969	25	axc2	1/18/2010 13:24:24	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:25:17	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:27:07	OM_1-18-2010_12-35-44
244622003	941969	1	axc2	1/18/2010 13:28:58	OM_1-18-2010_12-35-44
1202016421	941969	1	axc2	1/18/2010 13:29:52	OM_1-18-2010_12-35-44
1202016423	941969	1	axc2	1/18/2010 13:30:45	OM_1-18-2010_12-35-44
1202016425	941969	1	axc2	1/18/2010 13:31:38	OM_1-18-2010_12-35-44
244622004	941969	1	axc2	1/18/2010 13:32:31	OM_1-18-2010_12-35-44
244622005	941969	1	axc2	1/18/2010 13:33:24	OM_1-18-2010_12-35-44
244622006	941969	1	axc2	1/18/2010 13:34:17	OM_1-18-2010_12-35-44
244622007	941969	1	axc2	1/18/2010 13:35:10	OM_1-18-2010_12-35-44
244622008	941969	1	axc2	1/18/2010 13:36:04	OM_1-18-2010_12-35-44
244768001	941969	1	axc2	1/18/2010 13:36:56	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:37:49	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:39:38	OM_1-18-2010_12-35-44

244768002	941969	1	axc2	1/18/2010	13:41:27	OM_1-18-2010_12-35-44
244768003	941969	1	axc2	1/18/2010	13:42:19	OM_1-18-2010_12-35-44
244768004	941969	1	axc2	1/18/2010	13:43:12	OM_1-18-2010_12-35-44
244768005	941969	1	axc2	1/18/2010	13:44:03	OM_1-18-2010_12-35-44
244768006	941969	1	axc2	1/18/2010	13:44:55	OM_1-18-2010_12-35-44
244768007	941969	1	axc2	1/18/2010	13:45:50	OM_1-18-2010_12-35-44
244768008	941969	1	axc2	1/18/2010	13:46:44	OM_1-18-2010_12-35-44
244768009	941969	1	axc2	1/18/2010	13:47:37	OM_1-18-2010_12-35-44
244768010	941969	1	axc2	1/18/2010	13:48:31	OM_1-18-2010_12-35-44
244773001	941969	1	axc2	1/18/2010	13:49:24	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	13:50:17	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	13:52:07	OM_1-18-2010_12-35-44
1202016422	941969	1	axc2	1/18/2010	13:53:57	OM_1-18-2010_12-35-44
1202016424	941969	1	axc2	1/18/2010	13:54:50	OM_1-18-2010_12-35-44
1202016426	941969	1	axc2	1/18/2010	13:55:43	OM_1-18-2010_12-35-44
244773002	941969	1	axc2	1/18/2010	13:56:36	OM_1-18-2010_12-35-44
244773003	941969	1	axc2	1/18/2010	13:57:28	OM_1-18-2010_12-35-44
244773004	941969	1	axc2	1/18/2010	13:58:21	OM_1-18-2010_12-35-44
244609005	940627	5	axc2	1/18/2010	13:59:14	OM_1-18-2010_12-35-44
1202017519	942453	1	axc2	1/18/2010	14:00:07	OM_1-18-2010_12-35-44
1202017520	942453	1	axc2	1/18/2010	14:01:01	OM_1-18-2010_12-35-44
1202017521	942453	1	axc2	1/18/2010	14:01:56	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:02:47	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:04:37	OM_1-18-2010_12-35-44
244810001	942453	1	axc2	1/18/2010	14:06:27	OM_1-18-2010_12-35-44
1202012091*	940249	1	axc2	1/18/2010	14:07:21	OM_1-18-2010_12-35-44
1202012098*	940249	25	axc2	1/18/2010	14:08:12	OM_1-18-2010_12-35-44
244228002	940249	1	axc2	1/18/2010	14:09:04	OM_1-18-2010_12-35-44
1202012096	940249	1	axc2	1/18/2010	14:09:56	OM_1-18-2010_12-35-44
1202012094	940249	1	axc2	1/18/2010	14:10:51	OM_1-18-2010_12-35-44
1202012092	940249	1	axc2	1/18/2010	14:11:45	OM_1-18-2010_12-35-44
244228003	940249	1	axc2	1/18/2010	14:12:39	OM_1-18-2010_12-35-44
1202012093	940249	1	axc2	1/18/2010	14:13:33	OM_1-18-2010_12-35-44
1202012095	940249	1	axc2	1/18/2010	14:14:26	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:15:18	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:17:09	OM_1-18-2010_12-35-44
1202012091	940249	1	axc2	1/18/2010	14:18:58	OM_1-18-2010_12-35-44
1202012098	940249	25	axc2	1/18/2010	14:19:51	OM_1-18-2010_12-35-44
1202012097	940249	1	axc2	1/18/2010	14:20:44	OM_1-18-2010_12-35-44
244228004	940249	1	axc2	1/18/2010	14:21:37	OM_1-18-2010_12-35-44
244228005	940249	1	axc2	1/18/2010	14:22:30	OM_1-18-2010_12-35-44
244228006	940249	1	axc2	1/18/2010	14:23:23	OM_1-18-2010_12-35-44
244242001	940249	1	axc2	1/18/2010	14:24:17	OM_1-18-2010_12-35-44
244242002	940249	1	axc2	1/18/2010	14:25:09	OM_1-18-2010_12-35-44
244242003	940249	1	axc2	1/18/2010	14:26:02	OM_1-18-2010_12-35-44
244242004	940249	1	axc2	1/18/2010	14:26:54	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:27:47	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:29:37	OM_1-18-2010_12-35-44
244242005	940249	1	axc2	1/18/2010	14:31:26	OM_1-18-2010_12-35-44
244242006	940249	1	axc2	1/18/2010	14:32:18	OM_1-18-2010_12-35-44
244242007	940249	1	axc2	1/18/2010	14:33:12	OM_1-18-2010_12-35-44
244242008	940249	1	axc2	1/18/2010	14:34:06	OM_1-18-2010_12-35-44
244242009	940249	1	axc2	1/18/2010	14:35:01	OM_1-18-2010_12-35-44
244242010	940249	1	axc2	1/18/2010	14:35:55	OM_1-18-2010_12-35-44
244242011	940249	1	axc2	1/18/2010	14:36:48	OM_1-18-2010_12-35-44
244242012	940249	1	axc2	1/18/2010	14:37:42	OM_1-18-2010_12-35-44
244242013	940249	1	axc2	1/18/2010	14:38:36	OM_1-18-2010_12-35-44
244242014	940249	1	axc2	1/18/2010	14:39:29	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:40:21	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:42:12	OM_1-18-2010_12-35-44

1202012065	940244	1	axc2	1/18/2010	14:44:01	OM_1-18-2010_12-35-44
1202012072	940244	25	axc2	1/18/2010	14:44:54	OM_1-18-2010_12-35-44
244139009	940244	1	axc2	1/18/2010	14:45:47	OM_1-18-2010_12-35-44
1202012066	940244	1	axc2	1/18/2010	14:46:40	OM_1-18-2010_12-35-44
1202012068	940244	1	axc2	1/18/2010	14:47:32	OM_1-18-2010_12-35-44
1202012070	940244	1	axc2	1/18/2010	14:48:25	OM_1-18-2010_12-35-44
244139010	940244	1	axc2	1/18/2010	14:49:18	OM_1-18-2010_12-35-44
1202012067	940244	1	axc2	1/18/2010	14:50:12	OM_1-18-2010_12-35-44
1202012069	940244	1	axc2	1/18/2010	14:51:07	OM_1-18-2010_12-35-44
1202012071	940244	1	axc2	1/18/2010	14:52:01	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:52:53	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:54:43	OM_1-18-2010_12-35-44
244139011	940244	1	axc2	1/18/2010	14:56:34	OM_1-18-2010_12-35-44
244139012	940244	1	axc2	1/18/2010	14:57:28	OM_1-18-2010_12-35-44
244227001	940244	1	axc2	1/18/2010	14:58:22	OM_1-18-2010_12-35-44
244227002	940244	1	axc2	1/18/2010	14:59:16	OM_1-18-2010_12-35-44
244227003	940244	1	axc2	1/18/2010	15:00:09	OM_1-18-2010_12-35-44
244227004	940244	1	axc2	1/18/2010	15:01:03	OM_1-18-2010_12-35-44
244227005	940244	1	axc2	1/18/2010	15:01:56	OM_1-18-2010_12-35-44
244227006	940244	1	axc2	1/18/2010	15:02:50	OM_1-18-2010_12-35-44
244227007	940244	1	axc2	1/18/2010	15:03:43	OM_1-18-2010_12-35-44
244227008	940244	1	axc2	1/18/2010	15:04:35	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	15:05:28	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	15:07:18	OM_1-18-2010_12-35-44
244227009	940244	1	axc2	1/18/2010	15:09:08	OM_1-18-2010_12-35-44
244227010	940244	1	axc2	1/18/2010	15:10:00	OM_1-18-2010_12-35-44
244227011	940244	1	axc2	1/18/2010	15:10:55	OM_1-18-2010_12-35-44
244227012	940244	1	axc2	1/18/2010	15:11:50	OM_1-18-2010_12-35-44
244227013	940244	1	axc2	1/18/2010	15:12:44	OM_1-18-2010_12-35-44
244227014	940244	1	axc2	1/18/2010	15:13:38	OM_1-18-2010_12-35-44
244227015	940244	1	axc2	1/18/2010	15:14:33	OM_1-18-2010_12-35-44
244228001	940244	1	axc2	1/18/2010	15:15:27	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	15:16:19	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	15:18:10	OM_1-18-2010_12-35-44

Author: axc2 Date : 1/19/2010

Original Run Filename: OM_1-18-2010_12-35-44.OMN created 1/18/2010 12:35:44
Original Run Author's Signature: [axc2]
Current Run Filename: OM_1-18-2010_12-35-44.OMN last modified 1/18/2010 15:19:15
Current Run Author's Signature: [axc2]
Description: GL-GC-E-102 EPA 420.4, 9066
LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100118-01	1	S1	200	6.39	1/18/2010@12:39:03			200 ppb
WCN100118-02	1	S2	150	4.99	1/18/2010@12:39:55			150 ppb
WCN100118-03	1	S3	100	3.39	1/18/2010@12:40:48			100 ppb
WCN100118-04	1	S4	50.0	1.78	1/18/2010@12:41:40			50 ppb
WCN100118-05	1	S5	10.0	0.425	1/18/2010@12:42:34			10 ppb
WCN100118-06	1	S6	5.00	0.276	1/18/2010@12:43:27			CRDL 5.0 ppb
WCN100118-08	1	S7	0.00	0.0116	1/18/2010@12:44:21			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99944 > 0.99500					
Message			Pass					
Action			Continue					
WCN100118-07	1	S8	156	5.09	1/18/2010@12:46:12			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			3.7 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			3.7 < 10.0					
Message			ICV Passed					
Action			Continue					
WCN100118-08	1	S7	-3.54	-0.00105	1/18/2010@12:48:02			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-3.54 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-3.54 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100118-06	1	S6	4.85	0.267	1/18/2010@12:49:52			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			4.85 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			4.85 > 2.50					
Message			Pass					
Action			None					
1202013064|940627|MB	1	1	-2.14	0.0438	1/18/2010@12:51:41			
1202013071||LCS	1	2	53.9	1.84	1/18/2010@12:52:35			
244226001	1	3	-2.70	0.0257	1/18/2010@12:53:28			
1202013065||DUP	1	4	-2.50	0.0320	1/18/2010@12:54:21			
1202013067||MS	1	5	99.5	3.30	1/18/2010@12:55:14			
1202013069||MSD	1	6	108	3.56	1/18/2010@12:56:07			
244226002	1	7	-2.72	0.0251	1/18/2010@12:57:00			
244236001	1	8	-2.86	0.0207	1/18/2010@12:57:52			
1202013066||DUP	1	9	-2.28	0.0393	1/18/2010@12:58:45			
1202013068||MS	1	10	105	3.46	1/18/2010@12:59:37			
WCN100118-03	1	S3	109	3.59	1/18/2010@13:00:29			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			8.8 < 10.0					
Message			CCV Passed					
Action			Continue					

DQM Test: < - Percent Relative Difference								
		Result:	8.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-2.87	0.0203	1/18/2010@13:02:19			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.87 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.87 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202013070||MSD	1	11	105	3.49	1/18/2010@13:04:08			
244236004	1	12	-2.08	0.0457	1/18/2010@13:05:00			
244240002	1	13	-3.50	-8.65e-6	1/18/2010@13:05:51			
244243001	1	14	-3.66	-0.00508	1/18/2010@13:06:43			
244243002	1	15	-2.84	0.0212	1/18/2010@13:07:35			
244243003	1	16	-2.79	0.0230	1/18/2010@13:08:28			
244243004	1	17	-2.27	0.0396	1/18/2010@13:09:22			
244516001	1	18	-2.40	0.0353	1/18/2010@13:10:16			
244516002	1	19	-2.08	0.0457	1/18/2010@13:11:09			
244523001	1	20	-3.86	-0.0114	1/18/2010@13:12:02			
WCN100118-03	1	S3	109	3.60	1/18/2010@13:12:54			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-4.31	-0.0257	1/18/2010@13:14:44			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-4.31 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-4.31 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244525001	1	21	-2.34	0.0371	1/18/2010@13:16:33			
244525003	1	22	-2.43	0.0342	1/18/2010@13:17:26			
244532001	1	23	7.91	0.365	1/18/2010@13:18:19			
244537001	1	24	-1.03	0.0790	1/18/2010@13:19:11			
244574001	1	25	-0.528	0.0952	1/18/2010@13:20:04			
244580001	1	26	-1.41	0.0669	1/18/2010@13:20:56			
244583001	1	27	10.8	0.459	1/18/2010@13:21:49			
244609005	1	28	328	10.6	1/18/2010@13:22:40			
1202016420|941969|MB	1	29	-1.71	0.0574	1/18/2010@13:23:32			
1202016427||LCS	1	30	27.2	0.982	1/18/2010@13:24:24		25.00	
WCN100118-03	1	S3	109	3.59	1/18/2010@13:25:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-1.95	0.0499	1/18/2010@13:27:07			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.95 < 5.00					

		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.95 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244622003	1	31	-1.57	0.0620	1/18/2010@13:28:58			
1202016421||DUP	1	32	-2.30	0.0384	1/18/2010@13:29:52			
1202016423||MS	1	33	102	3.36	1/18/2010@13:30:45			
1202016425||MSD	1	34	105	3.46	1/18/2010@13:31:38			
244622004	1	35	-2.58	0.0297	1/18/2010@13:32:31			
244622005	1	36	-2.62	0.0283	1/18/2010@13:33:24			
244622006	1	37	-2.32	0.0379	1/18/2010@13:34:17			
244622007	1	38	-2.27	0.0394	1/18/2010@13:35:10			
244622008	1	39	-1.49	0.0644	1/18/2010@13:36:04			
244768001	1	40	5.61	0.292	1/18/2010@13:36:56			
WCN100118-03	1	S3	108	3.58	1/18/2010@13:37:49			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.50	-1.72e-6	1/18/2010@13:39:38			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.50 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.50 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244768002	1	41	-2.73	0.0249	1/18/2010@13:41:27			
244768003	1	42	-2.84	0.0214	1/18/2010@13:42:19			
244768004	1	43	-2.54	0.0309	1/18/2010@13:43:12			
244768005	1	44	-1.22	0.0731	1/18/2010@13:44:03			
244768006	1	45	-2.45	0.0337	1/18/2010@13:44:55			
244768007	1	46	-2.55	0.0307	1/18/2010@13:45:50			
244768008	1	47	-2.10	0.0449	1/18/2010@13:46:44			
244768009	1	48	-1.29	0.0708	1/18/2010@13:47:37			
244768010	1	49	-1.30	0.0706	1/18/2010@13:48:31			
244773001	1	50	-2.37	0.0364	1/18/2010@13:49:24			
WCN100118-03	1	S3	108	3.56	1/18/2010@13:50:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.12	0.0122	1/18/2010@13:52:07			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.12 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.12 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202016422||DUP	1	51	-2.60	0.0290	1/18/2010@13:53:57			
1202016424||MS	1	52	93.1	3.09	1/18/2010@13:54:50			

1202016426||MSD	1	53	95.7	3.18	1/18/2010@13:55:43			
244773002	1	54	-2.43	0.0343	1/18/2010@13:56:36			
244773003	1	55	-1.87	0.0522	1/18/2010@13:57:28			
244773004	1	56	-2.08	0.0457	1/18/2010@13:58:21			
244609005|940627|	1	28	60.8	2.06	1/18/2010@13:59:14		5.00	
1202017519|942453|MB	1	112	-2.32	0.0378	1/18/2010@14:00:07			
1202017520||LCS	1	113	-2.48	0.0329	1/18/2010@14:01:01			
1202017521||LCSD	1	114	-3.68	-0.00553	1/18/2010@14:01:56			
WCN100118-03	1	S3	107	3.55	1/18/2010@14:02:47			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.63	-0.00401	1/18/2010@14:04:37			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.63 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.63 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244810001	1	115	162	5.31	1/18/2010@14:06:27			
1202012091|940249|MB	1	57	615	19.8	1/18/2010@14:07:21			
1202012098||LCS	1	58	-1.60	0.0610	1/18/2010@14:08:12		25.00	
244228002	1	59	0.0437	0.114	1/18/2010@14:09:04			
1202012096||MSD	1	60	90.3	3.00	1/18/2010@14:09:56			
1202012094|MS	1	61	83.7	2.79	1/18/2010@14:10:51			
1202012092||DUP	1	62	-0.800	0.0865	1/18/2010@14:11:45			
244228003	1	63	-2.62	0.0284	1/18/2010@14:12:39			
1202012093||DUP	1	64	-2.57	0.0299	1/18/2010@14:13:33			
1202012095||MS	1	65	96.3	3.19	1/18/2010@14:14:26			
WCN100118-03	1	S3	108	3.57	1/18/2010@14:15:18			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.71	-0.00665	1/18/2010@14:17:09			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.71 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.71 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202012091||MB	1	57	-3.73	-0.00710	1/18/2010@14:18:58			
1202012098||LCS	1	58	27.7	0.999	1/18/2010@14:19:51		25.00	
1202012097||MSD	1	66	99.3	3.29	1/18/2010@14:20:44			
244228004	1	67	-1.50	0.0642	1/18/2010@14:21:37			
244228005	1	68	-1.84	0.0532	1/18/2010@14:22:30			
244228006	1	69	-0.258	0.104	1/18/2010@14:23:23			
244242001	1	70	-2.38	0.0359	1/18/2010@14:24:17			
244242002	1	71	0.545	0.130	1/18/2010@14:25:09			
244242003	1	72	-2.36	0.0365	1/18/2010@14:26:02			
244242004	1	73	-2.40	0.0354	1/18/2010@14:26:54			

WCN100118-03	1	S3	107	3.54	1/18/2010@14:27:47			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.74	-0.00766	1/18/2010@14:29:37			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.74 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.74 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244242005	1	74	-2.53	0.0310	1/18/2010@14:31:26			
244242006	1	75	-2.02	0.0476	1/18/2010@14:32:18			
244242007	1	76	-1.48	0.0646	1/18/2010@14:33:12			
244242008	1	77	-0.969	0.0811	1/18/2010@14:34:06			
244242009	1	78	1.92	0.173	1/18/2010@14:35:01			
244242010	1	79	-0.972	0.0810	1/18/2010@14:35:55			
244242011	1	80	2.46	0.191	1/18/2010@14:36:48			
244242012	1	81	-2.33	0.0374	1/18/2010@14:37:42			
244242013	1	82	-1.94	0.0501	1/18/2010@14:38:36			
244242014	1	83	-4.40	-0.0288	1/18/2010@14:39:29			
WCN100118-03	1	S3	105	3.48	1/18/2010@14:40:21			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.70	-0.00617	1/18/2010@14:42:12			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.70 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.70 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202012065|940244|MB	1	84	-1.88	0.0518	1/18/2010@14:44:01			
1202012072||LCS	1	85	28.4	1.02	1/18/2010@14:44:54		25.00	
244139009	1	86	-2.18	0.0422	1/18/2010@14:45:47			
1202012066||DUP	1	87	-1.68	0.0582	1/18/2010@14:46:40			
1202012068||MS	1	88	109	3.61	1/18/2010@14:47:32			
1202012070||MSD	1	89	92.7	3.08	1/18/2010@14:48:25			
244139010	1	90	-1.82	0.0540	1/18/2010@14:49:18			
1202012067||DUP	1	91	-2.24	0.0405	1/18/2010@14:50:12			
1202012069||MS	1	92	103	3.41	1/18/2010@14:51:07			
1202012071||MSD	1	93	111	3.67	1/18/2010@14:52:01			
WCN100118-03	1	S3	107	3.55	1/18/2010@14:52:53			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.4 < 10.0					

		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.08	0.0137	1/18/2010@14:54:43			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.08 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.08 > -5.00					
		Message	CCB Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
244139011	1	94	-1.12	0.0764	1/18/2010@14:56:34			
244139012	1	95	-4.10	-0.0191	1/18/2010@14:57:28			
244227001	1	96	-2.47	0.0332	1/18/2010@14:58:22			
244227002	1	97	-2.52	0.0315	1/18/2010@14:59:16			
244227003	1	98	-3.51	-3.03e-4	1/18/2010@15:00:09			
244227004	1	99	-1.79	0.0547	1/18/2010@15:01:03			
244227005	1	100	-1.73	0.0568	1/18/2010@15:01:56			
244227006	1	101	-2.49	0.0323	1/18/2010@15:02:50			
244227007	1	102	9.40	0.413	1/18/2010@15:03:43			
244227008	1	103	-0.858	0.0847	1/18/2010@15:04:35			
WCN100118-03	1	S3	106	3.50	1/18/2010@15:05:28			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-2.72	0.0249	1/18/2010@15:07:18			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.72 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.72 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244227009	1	104	-0.336	0.101	1/18/2010@15:09:08			
244227010	1	105	-2.18	0.0424	1/18/2010@15:10:00			
244227011	1	106	-1.74	0.0564	1/18/2010@15:10:55			
244227012	1	107	-2.46	0.0332	1/18/2010@15:11:50			
244227013	1	108	-1.71	0.0574	1/18/2010@15:12:44			
244227014	1	109	-2.04	0.0468	1/18/2010@15:13:38			
244227015	1	110	-0.817	0.0860	1/18/2010@15:14:33			
244228001	1	111	-3.51	-3.21e-4	1/18/2010@15:15:27			
WCN100118-03	1	S3	105	3.48	1/18/2010@15:16:19			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.64	-0.00439	1/18/2010@15:18:10			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.64 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								

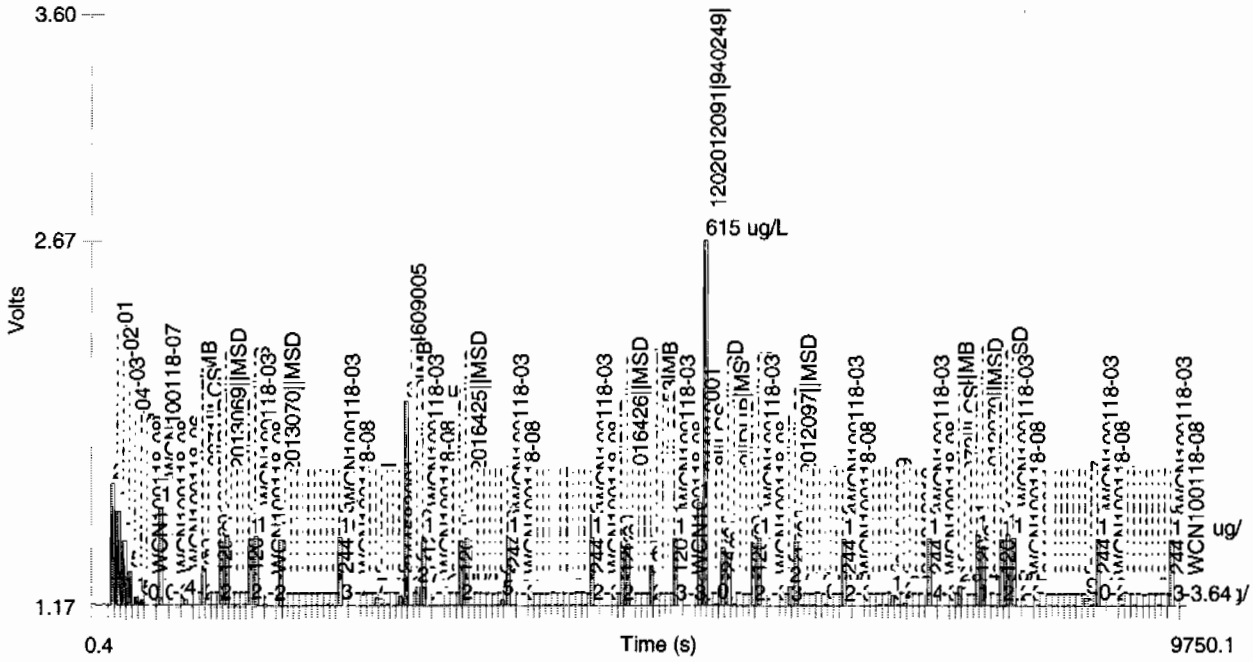
Author: axc2 Date : 1/19/2010

Result:	-3.64 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_1-18-2010_12-35-44.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

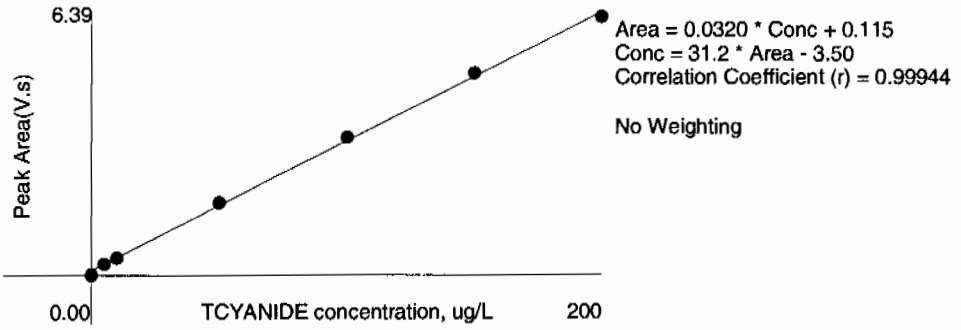


Author: axc2 Date : 1/19/2010

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.39	0.494	1.8	1/18/2010	12:40:06
2	150	1	4.99	0.384	-1.7	1/18/2010	12:40:58
3	100	1	3.39	0.261	-2.5	1/18/2010	12:41:50
4	50.0	1	1.78	0.137	-3.8	1/18/2010	12:42:43
5	10.0	1	0.425	0.0315	2.3	1/18/2010	12:43:37
6	5.00	1	0.276	0.0199	-0.6	1/18/2010	12:44:30
7	0.00	1	0.0116	3.98e-4		1/18/2010	12:45:24

Figure 1: TCYANIDE



General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1161-2

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	940244 and 940249	**Method:**	SW846 9012A
Prep Batch :	940240 and 940247	**Method:**	SW846 9010B Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
244228001	RE12-10-7709
244228002	RE12-10-7711
244228003	RE12-10-7712
244228004	RE12-10-7716
244228005	RE12-10-7718
244228006	RE12-10-7713
1202012065	Method Blank (MB)
1202012066	244139009(RE52-10-9528) Sample Duplicate (DUP)
1202012067	244139010(RE52-10-9530) Sample Duplicate (DUP)
1202012068	244139009(RE52-10-9528) Matrix Spike (MS)
1202012069	244139010(RE52-10-9530) Matrix Spike (MS)
1202012070	244139009(RE52-10-9528) Matrix Spike Duplicate (MSD)
1202012071	244139010(RE52-10-9530) Matrix Spike Duplicate (MSD)
1202012072	Laboratory Control Sample (LCS)
1202012091	Method Blank (MB)
1202012092	244228002(RE12-10-7711) Sample Duplicate (DUP)
1202012093	244228003(RE12-10-7712) Sample Duplicate (DUP)
1202012094	244228002(RE12-10-7711) Matrix Spike (MS)
1202012095	244228003(RE12-10-7712) Matrix Spike (MS)
1202012096	244228002(RE12-10-7711) Matrix Spike Duplicate (MSD)
1202012097	244228003(RE12-10-7712) Matrix Spike Duplicate (MSD)
1202012098	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 244139009 (RE52-10-9528), 244139010 (RE52-10-9530)- Batch 940244, 244228002 (RE12-10-7711) and 244228003 (RE12-10-7712)- Batch 940249.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202012066 (RE52-10-9528)- Batch 940244, 1202012092 (RE12-10-7711) and 244228002 (RE12-10-7711)- Batch 940249.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration: 1202012072 (LCS)- Batch 940244 and 1202012098 (LCS)- Batch 940249.

Sample Re-analysis
The following samples were re-analyzed due to instrument failure: 1202012091 (MB) and 1202012098 (LCS)- Batch 940249.

Miscellaneous Information

Data Exception (DER) Documentation
A DER was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Tom Lewis, Jr. **Date:** 02Feb10

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1161-2 GEL Work Order: 244228

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7709	Project:	LANL01004
Sample ID:	244228001	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	15.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.1	265	ug/kg	1	AXC2 01/18/10	1515	940244	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0837	940240

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7711	Project:	LANL01004
Sample ID:	244228002	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	17.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	72.6	267	ug/kg	1	AXC2 01/18/10	1409	940249	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0839	940247

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7712	Project:	LANL01004
Sample ID:	244228003	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	10.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	76.0	279	ug/kg	1	AXC2 01/18/10	1412	940249	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0839	940247

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7716	Project:	LANL01004
Sample ID:	244228004	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	4.68%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	68.6	252	ug/kg	1	AXC2 01/18/10	1421	940249	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0839	940247

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7718	Project:	LANL01004
Sample ID:	244228005	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	13%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.8	271	ug/kg	1	AXC2 01/18/10	1422	940249	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0839	940247

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: January 29, 2010

Client SDG: 10-1161-2

Client Sample ID:	RE12-10-7713	Project:	LANL01004
Sample ID:	244228006	Client ID:	LANL010
Matrix:	R		
Collect Date:	06-JAN-10 12:00		
Receive Date:	09-JAN-10		
Collector:	Client		
Moisture:	26.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	92.0	338	ug/kg	1	AXC2 01/18/10	1423	940249	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/15/10	0839	940247

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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QC Summary

Report Date: January 29, 2010
Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 244228

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 940244											
QC1202012066 244139009 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	01/18/10 14:46
QC1202012067 244139010 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A				01/18/10 14:50
QC1202012072 LCS											
Cyanide, Total	67900				71000	ug/kg		105	(46%-145%)		01/18/10 14:44
QC1202012065 MB											
Cyanide, Total				U	250	ug/kg					01/18/10 14:44
QC1202012068 244139009 MS											
Cyanide, Total	5170	U	ND		5630	ug/kg		109	(50%-130%)		01/18/10 14:47
QC1202012069 244139010 MS											
Cyanide, Total	5360	U	ND		5520	ug/kg		103	(50%-130%)		01/18/10 14:51
QC1202012070 244139009 MSD											
Cyanide, Total	5170	U	ND		4790	ug/kg	16.2	92.7	(0%-30%)		01/18/10 14:48
QC1202012071 244139010 MSD											
Cyanide, Total	5890	U	ND		6540	ug/kg	17.0	111	(0%-30%)		01/18/10 14:52
Batch 940249											
QC1202012092 244228002 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			AXC2	01/18/10 14:11
QC1202012093 244228003 DUP											
Cyanide, Total		U	ND	U	ND	ug/kg	N/A				01/18/10 14:13
QC1202012098 LCS											
Cyanide, Total	67900				69300	ug/kg		102	(46%-145%)		01/18/10 14:19
QC1202012091 MB											
Cyanide, Total				U	250	ug/kg					01/18/10 14:18
QC1202012094 244228002 MS											
Cyanide, Total	5850	U	ND		4900	ug/kg		83.7	(50%-130%)		01/18/10 14:10
QC1202012095 244228003 MS											
Cyanide, Total	5080	U	ND		4890	ug/kg		96.3	(50%-130%)		01/18/10 14:14
QC1202012096 244228002 MSD											
Cyanide, Total	5960	U	ND		5390	ug/kg	9.52	90.3	(0%-30%)		01/18/10 14:09
QC1202012097 244228003 MSD											
Cyanide, Total	5170	U	ND		5140	ug/kg	4.90	99.3	(0%-30%)		01/18/10 14:20

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product

QC Summary

Workorder: 244228

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
F	Estimated Value
H	Analytical holding time was exceeded
J	Value is estimated
M	M if above MDC and less than LLD
M	Matrix Related Failure
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI	Gamma Spectroscopy--Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 29-JAN-2010 07:58

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-1161-2

Flow Injection Analysis
Method: SW846 9012A Concentration Units:ug/L
Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**18-JAN-2010 12:46:12**	**OM_1-18-2010_12-35-44**	**156**	**150**	**104**	**(90%-110%)**	**Yes**
CCV	18-JAN-2010 14:02:47	OM_1-18-2010_12-35-44	107	100	107	(90%-110%)	Yes
CCV	18-JAN-2010 14:15:18	OM_1-18-2010_12-35-44	108	100	108	(90%-110%)	Yes
CCV	18-JAN-2010 14:27:47	OM_1-18-2010_12-35-44	107	100	107	(90%-110%)	Yes
CCV	18-JAN-2010 14:40:21	OM_1-18-2010_12-35-44	105	100	105	(90%-110%)	Yes
CCV	18-JAN-2010 14:52:53	OM_1-18-2010_12-35-44	107	100	107	(90%-110%)	Yes
CCV	18-JAN-2010 15:05:28	OM_1-18-2010_12-35-44	106	100	106	(90%-110%)	Yes
CCV	18-JAN-2010 15:16:19	OM_1-18-2010_12-35-44	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**18-JAN-2010 12:48:02**	**OM_1-18-2010_12-35-44**	**-3.54**	**5**	**Yes**
CCB	18-JAN-2010 14:04:37	OM_1-18-2010_12-35-44	-3.63	5	Yes
CCB	18-JAN-2010 14:17:09	OM_1-18-2010_12-35-44	-3.71	5	Yes
CCB	18-JAN-2010 14:29:37	OM_1-18-2010_12-35-44	-3.74	5	Yes
CCB	18-JAN-2010 14:42:12	OM_1-18-2010_12-35-44	-3.7	5	Yes
CCB	18-JAN-2010 14:54:43	OM_1-18-2010_12-35-44	-3.08	5	Yes
CCB	18-JAN-2010 15:07:18	OM_1-18-2010_12-35-44	-2.72	5	Yes
CCB	18-JAN-2010 15:18:10	OM_1-18-2010_12-35-44	-3.64	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 940240

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202012072	URF1200957-01	.25	g
MS	1202012068	URF1184831-02	.025	mL
MS	1202012069	URF1184831-02	.025	mL
MSD	1202012070	URF1184831-02	.025	mL
MSD	1202012071	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202012065		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.5 g	25 mL	50	SOIL
LCS	1202012072		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.25 g	25 mL	100	SOIL
SAMPLE	244139009		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.5 g	25 mL	50	SOIL
DUP	1202012066	244139009	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.53 g	25 mL	47.16981	SOIL
MS	1202012068	244139009	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.51 g	25 mL	49.01961	SOIL
MSD	1202012070	244139009	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	244139010		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.54 g	25 mL	46.2963	SOIL
DUP	1202012067	244139010	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.55 g	25 mL	45.45455	SOIL
MS	1202012069	244139010	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.55 g	25 mL	45.45455	SOIL
MSD	1202012071	244139010	SW846 9010B Prep	15-JAN-2010 08:36	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244139011		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	244139012		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227001		SW846 9010B Prep	15-JAN-2010 08:36	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227002		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227003		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227004		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227005		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227006		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227007		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227008		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227009		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227010		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227011		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244227012		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	244227013		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	244227014		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	244227015		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	244228001		SW846 9010B Prep	15-JAN-2010 08:37	>12	0.56 g	25 mL	44.64286	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN100114-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1238146-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1238142-C	1.25 mL	Bismuth Nitrate Solution

Comments:

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 940247

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202012098	URF1200957-01	.25	g
MS	1202012094	URF1184831-02	.025	mL
MS	1202012095	URF1184831-02	.025	mL
MSD	1202012096	URF1184831-02	.025	mL
MSD	1202012097	URF1184831-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202012091		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.5 g	25 mL	50	SOIL
LCS	1202012098		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.25 g	25 mL	100	SOIL
SAMPLE	244228002		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.57 g	25 mL	43.85965	SOIL
DUP	1202012092	244228002	SW846 9010B Prep	15-JAN-2010 08:39	>12	0.53 g	25 mL	47.16981	SOIL
MS	1202012094	244228002	SW846 9010B Prep	15-JAN-2010 08:39	>12	0.52 g	25 mL	48.07692	SOIL
MSD	1202012096	244228002	SW846 9010B Prep	15-JAN-2010 08:39	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	244228003		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.5 g	25 mL	50	SOIL
DUP	1202012093	244228003	SW846 9010B Prep	15-JAN-2010 08:39	>12	0.53 g	25 mL	47.16981	SOIL
MS	1202012095	244228003	SW846 9010B Prep	15-JAN-2010 08:39	>12	0.55 g	25 mL	45.45455	SOIL
MSD	1202012097	244228003	SW846 9010B Prep	15-JAN-2010 08:39	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	244228004		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	244228005		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	244228006		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244242001		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	244242002		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.5 g	25 mL	50	SOIL
SAMPLE	244242003		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	244242004		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	244242005		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.58 g	25 mL	43.10345	SOIL
SAMPLE	244242006		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	244242007		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	244242008		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	244242009		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	244242010		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	244242011		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	244242012		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	244242013		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	244242014		SW846 9010B Prep	15-JAN-2010 08:39	>12	0.5 g	25 mL	50	SOIL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN100114-07	.0375 mL	150 ppb CN Distilled ICV Standard
1176724-C	1.25 mL	0.8N H3NO3S
1238146-C	2.5 mL	50% H2SO4 CN Prep
1176778-C	1 mL	51% MgCl2 Soln
1238142-C	1.25 mL	Bismuth Nitrate Solution

Comments.

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	1/18/2010 12:39:03	OM_1-18-2010_12-35-44
150 ppb		1	axc2	1/18/2010 12:39:55	OM_1-18-2010_12-35-44
100 ppb		1	axc2	1/18/2010 12:40:48	OM_1-18-2010_12-35-44
50 ppb		1	axc2	1/18/2010 12:41:40	OM_1-18-2010_12-35-44
10 ppb		1	axc2	1/18/2010 12:42:34	OM_1-18-2010_12-35-44
CRDL 5.0 ppb		1	axc2	1/18/2010 12:43:27	OM_1-18-2010_12-35-44
ICAL-00		1	axc2	1/18/2010 12:44:21	OM_1-18-2010_12-35-44
ICV		1	axc2	1/18/2010 12:46:12	OM_1-18-2010_12-35-44
ICB		1	axc2	1/18/2010 12:48:02	OM_1-18-2010_12-35-44
CRDL		1	axc2	1/18/2010 12:49:52	OM_1-18-2010_12-35-44
1202013064	940627	1	axc2	1/18/2010 12:51:41	OM_1-18-2010_12-35-44
1202013071	940627	1	axc2	1/18/2010 12:52:35	OM_1-18-2010_12-35-44
244226001	940627	1	axc2	1/18/2010 12:53:28	OM_1-18-2010_12-35-44
1202013065	940627	1	axc2	1/18/2010 12:54:21	OM_1-18-2010_12-35-44
1202013067	940627	1	axc2	1/18/2010 12:55:14	OM_1-18-2010_12-35-44
1202013069	940627	1	axc2	1/18/2010 12:56:07	OM_1-18-2010_12-35-44
244226002	940627	1	axc2	1/18/2010 12:57:00	OM_1-18-2010_12-35-44
244236001	940627	1	axc2	1/18/2010 12:57:52	OM_1-18-2010_12-35-44
1202013066	940627	1	axc2	1/18/2010 12:58:45	OM_1-18-2010_12-35-44
1202013068	940627	1	axc2	1/18/2010 12:59:37	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:00:29	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:02:19	OM_1-18-2010_12-35-44
1202013070	940627	1	axc2	1/18/2010 13:04:08	OM_1-18-2010_12-35-44
244236004	940627	1	axc2	1/18/2010 13:05:00	OM_1-18-2010_12-35-44
244240002	940627	1	axc2	1/18/2010 13:05:51	OM_1-18-2010_12-35-44
244243001	940627	1	axc2	1/18/2010 13:06:43	OM_1-18-2010_12-35-44
244243002	940627	1	axc2	1/18/2010 13:07:35	OM_1-18-2010_12-35-44
244243003	940627	1	axc2	1/18/2010 13:08:28	OM_1-18-2010_12-35-44
244243004	940627	1	axc2	1/18/2010 13:09:22	OM_1-18-2010_12-35-44
244516001	940627	1	axc2	1/18/2010 13:10:16	OM_1-18-2010_12-35-44
244516002	940627	1	axc2	1/18/2010 13:11:09	OM_1-18-2010_12-35-44
244523001	940627	1	axc2	1/18/2010 13:12:02	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:12:54	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:14:44	OM_1-18-2010_12-35-44
244525001	940627	1	axc2	1/18/2010 13:16:33	OM_1-18-2010_12-35-44
244525003	940627	1	axc2	1/18/2010 13:17:26	OM_1-18-2010_12-35-44
244532001	940627	1	axc2	1/18/2010 13:18:19	OM_1-18-2010_12-35-44
244537001	940627	1	axc2	1/18/2010 13:19:11	OM_1-18-2010_12-35-44
244574001	940627	1	axc2	1/18/2010 13:20:04	OM_1-18-2010_12-35-44
244580001	940627	1	axc2	1/18/2010 13:20:56	OM_1-18-2010_12-35-44
244583001	940627	1	axc2	1/18/2010 13:21:49	OM_1-18-2010_12-35-44
244609005	940627	1	axc2	1/18/2010 13:22:40	OM_1-18-2010_12-35-44
1202016420	941969	1	axc2	1/18/2010 13:23:32	OM_1-18-2010_12-35-44
1202016427	941969	25	axc2	1/18/2010 13:24:24	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:25:17	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:27:07	OM_1-18-2010_12-35-44
244622003	941969	1	axc2	1/18/2010 13:28:58	OM_1-18-2010_12-35-44
1202016421	941969	1	axc2	1/18/2010 13:29:52	OM_1-18-2010_12-35-44
1202016423	941969	1	axc2	1/18/2010 13:30:45	OM_1-18-2010_12-35-44
1202016425	941969	1	axc2	1/18/2010 13:31:38	OM_1-18-2010_12-35-44
244622004	941969	1	axc2	1/18/2010 13:32:31	OM_1-18-2010_12-35-44
244622005	941969	1	axc2	1/18/2010 13:33:24	OM_1-18-2010_12-35-44
244622006	941969	1	axc2	1/18/2010 13:34:17	OM_1-18-2010_12-35-44
244622007	941969	1	axc2	1/18/2010 13:35:10	OM_1-18-2010_12-35-44
244622008	941969	1	axc2	1/18/2010 13:36:04	OM_1-18-2010_12-35-44
244768001	941969	1	axc2	1/18/2010 13:36:56	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010 13:37:49	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010 13:39:38	OM_1-18-2010_12-35-44

244768002	941969	1	axc2	1/18/2010	13:41:27	OM_1-18-2010_12-35-44
244768003	941969	1	axc2	1/18/2010	13:42:19	OM_1-18-2010_12-35-44
244768004	941969	1	axc2	1/18/2010	13:43:12	OM_1-18-2010_12-35-44
244768005	941969	1	axc2	1/18/2010	13:44:03	OM_1-18-2010_12-35-44
244768006	941969	1	axc2	1/18/2010	13:44:55	OM_1-18-2010_12-35-44
244768007	941969	1	axc2	1/18/2010	13:45:50	OM_1-18-2010_12-35-44
244768008	941969	1	axc2	1/18/2010	13:46:44	OM_1-18-2010_12-35-44
244768009	941969	1	axc2	1/18/2010	13:47:37	OM_1-18-2010_12-35-44
244768010	941969	1	axc2	1/18/2010	13:48:31	OM_1-18-2010_12-35-44
244773001	941969	1	axc2	1/18/2010	13:49:24	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	13:50:17	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	13:52:07	OM_1-18-2010_12-35-44
1202016422	941969	1	axc2	1/18/2010	13:53:57	OM_1-18-2010_12-35-44
1202016424	941969	1	axc2	1/18/2010	13:54:50	OM_1-18-2010_12-35-44
1202016426	941969	1	axc2	1/18/2010	13:55:43	OM_1-18-2010_12-35-44
244773002	941969	1	axc2	1/18/2010	13:56:36	OM_1-18-2010_12-35-44
244773003	941969	1	axc2	1/18/2010	13:57:28	OM_1-18-2010_12-35-44
244773004	941969	1	axc2	1/18/2010	13:58:21	OM_1-18-2010_12-35-44
244609005	940627	5	axc2	1/18/2010	13:59:14	OM_1-18-2010_12-35-44
1202017519	942453	1	axc2	1/18/2010	14:00:07	OM_1-18-2010_12-35-44
1202017520	942453	1	axc2	1/18/2010	14:01:01	OM_1-18-2010_12-35-44
1202017521	942453	1	axc2	1/18/2010	14:01:56	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:02:47	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:04:37	OM_1-18-2010_12-35-44
244810001	942453	1	axc2	1/18/2010	14:06:27	OM_1-18-2010_12-35-44
1202012091*	940249	1	axc2	1/18/2010	14:07:21	OM_1-18-2010_12-35-44
1202012098*	940249	25	axc2	1/18/2010	14:08:12	OM_1-18-2010_12-35-44
244228002	940249	1	axc2	1/18/2010	14:09:04	OM_1-18-2010_12-35-44
1202012096	940249	1	axc2	1/18/2010	14:09:56	OM_1-18-2010_12-35-44
1202012094	940249	1	axc2	1/18/2010	14:10:51	OM_1-18-2010_12-35-44
1202012092	940249	1	axc2	1/18/2010	14:11:45	OM_1-18-2010_12-35-44
244228003	940249	1	axc2	1/18/2010	14:12:39	OM_1-18-2010_12-35-44
1202012093	940249	1	axc2	1/18/2010	14:13:33	OM_1-18-2010_12-35-44
1202012095	940249	1	axc2	1/18/2010	14:14:26	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:15:18	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:17:09	OM_1-18-2010_12-35-44
1202012091	940249	1	axc2	1/18/2010	14:18:58	OM_1-18-2010_12-35-44
1202012098	940249	25	axc2	1/18/2010	14:19:51	OM_1-18-2010_12-35-44
1202012097	940249	1	axc2	1/18/2010	14:20:44	OM_1-18-2010_12-35-44
244228004	940249	1	axc2	1/18/2010	14:21:37	OM_1-18-2010_12-35-44
244228005	940249	1	axc2	1/18/2010	14:22:30	OM_1-18-2010_12-35-44
244228006	940249	1	axc2	1/18/2010	14:23:23	OM_1-18-2010_12-35-44
244242001	940249	1	axc2	1/18/2010	14:24:17	OM_1-18-2010_12-35-44
244242002	940249	1	axc2	1/18/2010	14:25:09	OM_1-18-2010_12-35-44
244242003	940249	1	axc2	1/18/2010	14:26:02	OM_1-18-2010_12-35-44
244242004	940249	1	axc2	1/18/2010	14:26:54	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:27:47	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:29:37	OM_1-18-2010_12-35-44
244242005	940249	1	axc2	1/18/2010	14:31:26	OM_1-18-2010_12-35-44
244242006	940249	1	axc2	1/18/2010	14:32:18	OM_1-18-2010_12-35-44
244242007	940249	1	axc2	1/18/2010	14:33:12	OM_1-18-2010_12-35-44
244242008	940249	1	axc2	1/18/2010	14:34:06	OM_1-18-2010_12-35-44
244242009	940249	1	axc2	1/18/2010	14:35:01	OM_1-18-2010_12-35-44
244242010	940249	1	axc2	1/18/2010	14:35:55	OM_1-18-2010_12-35-44
244242011	940249	1	axc2	1/18/2010	14:36:48	OM_1-18-2010_12-35-44
244242012	940249	1	axc2	1/18/2010	14:37:42	OM_1-18-2010_12-35-44
244242013	940249	1	axc2	1/18/2010	14:38:36	OM_1-18-2010_12-35-44
244242014	940249	1	axc2	1/18/2010	14:39:29	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:40:21	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:42:12	OM_1-18-2010_12-35-44

1202012065	940244	1	axc2	1/18/2010	14:44:01	OM_1-18-2010_12-35-44
1202012072	940244	25	axc2	1/18/2010	14:44:54	OM_1-18-2010_12-35-44
244139009	940244	1	axc2	1/18/2010	14:45:47	OM_1-18-2010_12-35-44
1202012066	940244	1	axc2	1/18/2010	14:46:40	OM_1-18-2010_12-35-44
1202012068	940244	1	axc2	1/18/2010	14:47:32	OM_1-18-2010_12-35-44
1202012070	940244	1	axc2	1/18/2010	14:48:25	OM_1-18-2010_12-35-44
244139010	940244	1	axc2	1/18/2010	14:49:18	OM_1-18-2010_12-35-44
1202012067	940244	1	axc2	1/18/2010	14:50:12	OM_1-18-2010_12-35-44
1202012069	940244	1	axc2	1/18/2010	14:51:07	OM_1-18-2010_12-35-44
1202012071	940244	1	axc2	1/18/2010	14:52:01	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	14:52:53	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	14:54:43	OM_1-18-2010_12-35-44
244139011	940244	1	axc2	1/18/2010	14:56:34	OM_1-18-2010_12-35-44
244139012	940244	1	axc2	1/18/2010	14:57:28	OM_1-18-2010_12-35-44
244227001	940244	1	axc2	1/18/2010	14:58:22	OM_1-18-2010_12-35-44
244227002	940244	1	axc2	1/18/2010	14:59:16	OM_1-18-2010_12-35-44
244227003	940244	1	axc2	1/18/2010	15:00:09	OM_1-18-2010_12-35-44
244227004	940244	1	axc2	1/18/2010	15:01:03	OM_1-18-2010_12-35-44
244227005	940244	1	axc2	1/18/2010	15:01:56	OM_1-18-2010_12-35-44
244227006	940244	1	axc2	1/18/2010	15:02:50	OM_1-18-2010_12-35-44
244227007	940244	1	axc2	1/18/2010	15:03:43	OM_1-18-2010_12-35-44
244227008	940244	1	axc2	1/18/2010	15:04:35	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	15:05:28	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	15:07:18	OM_1-18-2010_12-35-44
244227009	940244	1	axc2	1/18/2010	15:09:08	OM_1-18-2010_12-35-44
244227010	940244	1	axc2	1/18/2010	15:10:00	OM_1-18-2010_12-35-44
244227011	940244	1	axc2	1/18/2010	15:10:55	OM_1-18-2010_12-35-44
244227012	940244	1	axc2	1/18/2010	15:11:50	OM_1-18-2010_12-35-44
244227013	940244	1	axc2	1/18/2010	15:12:44	OM_1-18-2010_12-35-44
244227014	940244	1	axc2	1/18/2010	15:13:38	OM_1-18-2010_12-35-44
244227015	940244	1	axc2	1/18/2010	15:14:33	OM_1-18-2010_12-35-44
244228001	940244	1	axc2	1/18/2010	15:15:27	OM_1-18-2010_12-35-44
CCV		1	axc2	1/18/2010	15:16:19	OM_1-18-2010_12-35-44
CCB		1	axc2	1/18/2010	15:18:10	OM_1-18-2010_12-35-44

Author: axc2 Date : 1/19/2010

Original Run Filename: OM_1-18-2010_12-35-44.OMN created 1/18/2010 12:35:44
Original Run Author's Signature: [axc2]
Current Run Filename: OM_1-18-2010_12-35-44.OMN last modified 1/18/2010 15:19:15
Current Run Author's Signature: [axc2]
Description: GL-GC-E-102 EPA 420.4, 9066
LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100118-01	1	S1	200	6.39	1/18/2010@12:39:03			200 ppb
WCN100118-02	1	S2	150	4.99	1/18/2010@12:39:55			150 ppb
WCN100118-03	1	S3	100	3.39	1/18/2010@12:40:48			100 ppb
WCN100118-04	1	S4	50.0	1.78	1/18/2010@12:41:40			50 ppb
WCN100118-05	1	S5	10.0	0.425	1/18/2010@12:42:34			10 ppb
WCN100118-06	1	S6	5.00	0.276	1/18/2010@12:43:27			CRDL 5.0 ppb
WCN100118-08	1	S7	0.00	0.0116	1/18/2010@12:44:21			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99944 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN100118-07	1	S8	156	5.09	1/18/2010@12:46:12			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	3.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.7 < 10.0					
		Message	ICV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.54	-0.00105	1/18/2010@12:48:02			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.54 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.54 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN100118-06	1	S6	4.85	0.267	1/18/2010@12:49:52			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.85 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.85 > 2.50					
		Message	Pass					
		Action	None					
1202013064|940627|MB	1	1	-2.14	0.0438	1/18/2010@12:51:41			
1202013071||LCS	1	2	53.9	1.84	1/18/2010@12:52:35			
244226001	1	3	-2.70	0.0257	1/18/2010@12:53:28			
1202013065||DUP	1	4	-2.50	0.0320	1/18/2010@12:54:21			
1202013067||MS	1	5	99.5	3.30	1/18/2010@12:55:14			
1202013069||MSD	1	6	108	3.56	1/18/2010@12:56:07			
244226002	1	7	-2.72	0.0251	1/18/2010@12:57:00			
244236001	1	8	-2.86	0.0207	1/18/2010@12:57:52			
1202013066||DUP	1	9	-2.28	0.0393	1/18/2010@12:58:45			
1202013068||MS	1	10	105	3.46	1/18/2010@12:59:37			
WCN100118-03	1	S3	109	3.59	1/18/2010@13:00:29			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					

DQM Test: < - Percent Relative Difference								
		Result:	8.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-2.87	0.0203	1/18/2010@13:02:19			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.87 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.87 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202013070||MSD	1	11	105	3.49	1/18/2010@13:04:08			
244236004	1	12	-2.08	0.0457	1/18/2010@13:05:00			
244240002	1	13	-3.50	-8.65e-6	1/18/2010@13:05:51			
244243001	1	14	-3.66	-0.00508	1/18/2010@13:06:43			
244243002	1	15	-2.84	0.0212	1/18/2010@13:07:35			
244243003	1	16	-2.79	0.0230	1/18/2010@13:08:28			
244243004	1	17	-2.27	0.0396	1/18/2010@13:09:22			
244516001	1	18	-2.40	0.0353	1/18/2010@13:10:16			
244516002	1	19	-2.08	0.0457	1/18/2010@13:11:09			
244523001	1	20	-3.86	-0.0114	1/18/2010@13:12:02			
WCN100118-03	1	S3	109	3.60	1/18/2010@13:12:54			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	9.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-4.31	-0.0257	1/18/2010@13:14:44			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-4.31 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-4.31 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244525001	1	21	-2.34	0.0371	1/18/2010@13:16:33			
244525003	1	22	-2.43	0.0342	1/18/2010@13:17:26			
244532001	1	23	7.91	0.365	1/18/2010@13:18:19			
244537001	1	24	-1.03	0.0790	1/18/2010@13:19:11			
244574001	1	25	-0.528	0.0952	1/18/2010@13:20:04			
244580001	1	26	-1.41	0.0669	1/18/2010@13:20:56			
244583001	1	27	10.8	0.459	1/18/2010@13:21:49			
244609005	1	28	328	10.6	1/18/2010@13:22:40			
1202016420|941969|MB	1	29	-1.71	0.0574	1/18/2010@13:23:32			
1202016427||LCS	1	30	27.2	0.982	1/18/2010@13:24:24		25.00	
WCN100118-03	1	S3	109	3.59	1/18/2010@13:25:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-1.95	0.0499	1/18/2010@13:27:07			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.95 < 5.00					

		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.95 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244622003	1	31	-1.57	0.0620	1/18/2010@13:28:58			
1202016421||DUP	1	32	-2.30	0.0384	1/18/2010@13:29:52			
1202016423||MS	1	33	102	3.36	1/18/2010@13:30:45			
1202016425||MSD	1	34	105	3.46	1/18/2010@13:31:38			
244622004	1	35	-2.58	0.0297	1/18/2010@13:32:31			
244622005	1	36	-2.62	0.0283	1/18/2010@13:33:24			
244622006	1	37	-2.32	0.0379	1/18/2010@13:34:17			
244622007	1	38	-2.27	0.0394	1/18/2010@13:35:10			
244622008	1	39	-1.49	0.0644	1/18/2010@13:36:04			
244768001	1	40	5.61	0.292	1/18/2010@13:36:56			
WCN100118-03	1	S3	108	3.58	1/18/2010@13:37:49			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	8.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.50	-1.72e-6	1/18/2010@13:39:38			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.50 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.50 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244768002	1	41	-2.73	0.0249	1/18/2010@13:41:27			
244768003	1	42	-2.84	0.0214	1/18/2010@13:42:19			
244768004	1	43	-2.54	0.0309	1/18/2010@13:43:12			
244768005	1	44	-1.22	0.0731	1/18/2010@13:44:03			
244768006	1	45	-2.45	0.0337	1/18/2010@13:44:55			
244768007	1	46	-2.55	0.0307	1/18/2010@13:45:50			
244768008	1	47	-2.10	0.0449	1/18/2010@13:46:44			
244768009	1	48	-1.29	0.0708	1/18/2010@13:47:37			
244768010	1	49	-1.30	0.0706	1/18/2010@13:48:31			
244773001	1	50	-2.37	0.0364	1/18/2010@13:49:24			
WCN100118-03	1	S3	108	3.56	1/18/2010@13:50:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.12	0.0122	1/18/2010@13:52:07			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.12 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.12 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202016422||DUP	1	51	-2.60	0.0290	1/18/2010@13:53:57			
1202016424||MS	1	52	93.1	3.09	1/18/2010@13:54:50			

1202016426||MSD	1	53	95.7	3.18	1/18/2010@13:55:43			
244773002	1	54	-2.43	0.0343	1/18/2010@13:56:36			
244773003	1	55	-1.87	0.0522	1/18/2010@13:57:28			
244773004	1	56	-2.08	0.0457	1/18/2010@13:58:21			
244609005|940627|	1	28	60.8	2.06	1/18/2010@13:59:14		5.00	
1202017519|942453|MB	1	112	-2.32	0.0378	1/18/2010@14:00:07			
1202017520||LCS	1	113	-2.48	0.0329	1/18/2010@14:01:01			
1202017521||LCSD	1	114	-3.68	-0.00553	1/18/2010@14:01:56			
WCN100118-03	1	S3	107	3.55	1/18/2010@14:02:47			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	7.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	7.5 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.63	-0.00401	1/18/2010@14:04:37			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-3.63 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-3.63 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244810001	1	115	162	5.31	1/18/2010@14:06:27			
1202012091|940249|MB	1	57	615	19.8	1/18/2010@14:07:21			
1202012098||LCS	1	58	-1.60	0.0610	1/18/2010@14:08:12		25.00	
244228002	1	59	0.0437	0.114	1/18/2010@14:09:04			
1202012096||MSD	1	60	90.3	3.00	1/18/2010@14:09:56			
1202012094||MS	1	61	83.7	2.79	1/18/2010@14:10:51			
1202012092||DUP	1	62	-0.800	0.0865	1/18/2010@14:11:45			
244228003	1	63	-2.62	0.0284	1/18/2010@14:12:39			
1202012093||DUP	1	64	-2.57	0.0299	1/18/2010@14:13:33			
1202012095||MS	1	65	96.3	3.19	1/18/2010@14:14:26			
WCN100118-03	1	S3	108	3.57	1/18/2010@14:15:18			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	8.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	8.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.71	-0.00665	1/18/2010@14:17:09			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-3.71 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-3.71 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202012091||MB	1	57	-3.73	-0.00710	1/18/2010@14:18:58			
1202012098||LCS	1	58	27.7	0.999	1/18/2010@14:19:51		25.00	
1202012097||MSD	1	66	99.3	3.29	1/18/2010@14:20:44			
244228004	1	67	-1.50	0.0642	1/18/2010@14:21:37			
244228005	1	68	-1.84	0.0532	1/18/2010@14:22:30			
244228006	1	69	-0.258	0.104	1/18/2010@14:23:23			
244242001	1	70	-2.38	0.0359	1/18/2010@14:24:17			
244242002	1	71	0.545	0.130	1/18/2010@14:25:09			
244242003	1	72	-2.36	0.0365	1/18/2010@14:26:02			
244242004	1	73	-2.40	0.0354	1/18/2010@14:26:54			

WCN100118-03	1	S3	107	3.54	1/18/2010@14:27:47			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.74	-0.00766	1/18/2010@14:29:37			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.74 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.74 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244242005	1	74	-2.53	0.0310	1/18/2010@14:31:26			
244242006	1	75	-2.02	0.0476	1/18/2010@14:32:18			
244242007	1	76	-1.48	0.0646	1/18/2010@14:33:12			
244242008	1	77	-0.969	0.0811	1/18/2010@14:34:06			
244242009	1	78	1.92	0.173	1/18/2010@14:35:01			
244242010	1	79	-0.972	0.0810	1/18/2010@14:35:55			
244242011	1	80	2.46	0.191	1/18/2010@14:36:48			
244242012	1	81	-2.33	0.0374	1/18/2010@14:37:42			
244242013	1	82	-1.94	0.0501	1/18/2010@14:38:36			
244242014	1	83	-4.40	-0.0288	1/18/2010@14:39:29			
WCN100118-03	1	S3	105	3.48	1/18/2010@14:40:21			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.1 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.70	-0.00617	1/18/2010@14:42:12			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.70 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.70 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202012065|940244|MB	1	84	-1.88	0.0518	1/18/2010@14:44:01			
1202012072||LCS	1	85	28.4	1.02	1/18/2010@14:44:54		25.00	
244139009	1	86	-2.18	0.0422	1/18/2010@14:45:47			
1202012066||DUP	1	87	-1.68	0.0582	1/18/2010@14:46:40			
1202012068||MS	1	88	109	3.61	1/18/2010@14:47:32			
1202012070||MSD	1	89	92.7	3.08	1/18/2010@14:48:25			
244139010	1	90	-1.82	0.0540	1/18/2010@14:49:18			
1202012067||DUP	1	91	-2.24	0.0405	1/18/2010@14:50:12			
1202012069||MS	1	92	103	3.41	1/18/2010@14:51:07			
1202012071||MSD	1	93	111	3.67	1/18/2010@14:52:01			
WCN100118-03	1	S3	107	3.55	1/18/2010@14:52:53			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.4 < 10.0					

		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.08	0.0137	1/18/2010@14:54:43			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.08 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-3.08 > -5.00					
		Message	CCB Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
244139011	1	94	-1.12	0.0764	1/18/2010@14:56:34			
244139012	1	95	-4.10	-0.0191	1/18/2010@14:57:28			
244227001	1	96	-2.47	0.0332	1/18/2010@14:58:22			
244227002	1	97	-2.52	0.0315	1/18/2010@14:59:16			
244227003	1	98	-3.51	-3.03e-4	1/18/2010@15:00:09			
244227004	1	99	-1.79	0.0547	1/18/2010@15:01:03			
244227005	1	100	-1.73	0.0568	1/18/2010@15:01:56			
244227006	1	101	-2.49	0.0323	1/18/2010@15:02:50			
244227007	1	102	9.40	0.413	1/18/2010@15:03:43			
244227008	1	103	-0.858	0.0847	1/18/2010@15:04:35			
WCN100118-03	1	S3	106	3.50	1/18/2010@15:05:28			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-2.72	0.0249	1/18/2010@15:07:18			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.72 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.72 > -5.00					
		Message	CCB Passed					
		Action	Continue					
244227009	1	104	-0.336	0.101	1/18/2010@15:09:08			
244227010	1	105	-2.18	0.0424	1/18/2010@15:10:00			
244227011	1	106	-1.74	0.0564	1/18/2010@15:10:55			
244227012	1	107	-2.46	0.0332	1/18/2010@15:11:50			
244227013	1	108	-1.71	0.0574	1/18/2010@15:12:44			
244227014	1	109	-2.04	0.0468	1/18/2010@15:13:38			
244227015	1	110	-0.817	0.0860	1/18/2010@15:14:33			
244228001	1	111	-3.51	-3.21e-4	1/18/2010@15:15:27			
WCN100118-03	1	S3	105	3.48	1/18/2010@15:16:19			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100118-08	1	S7	-3.64	-0.00439	1/18/2010@15:18:10			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-3.64 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								

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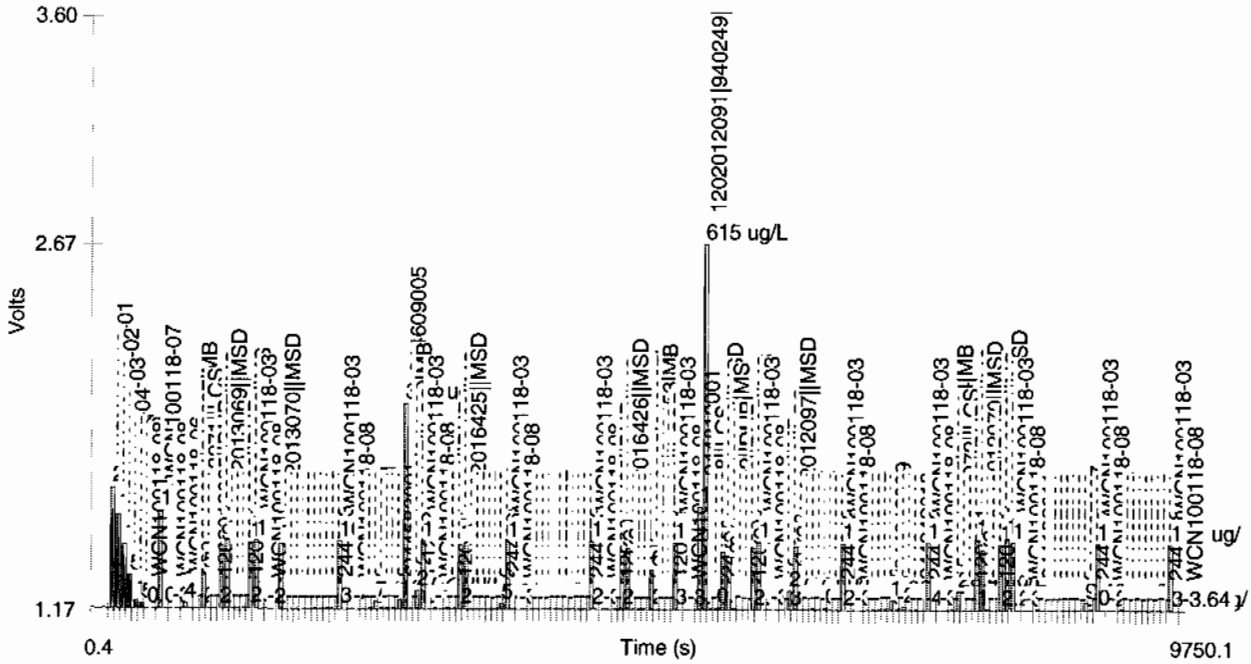
Result:	-3.64 > -5.00					
Message	CCB Passed					
Action	Continue					

Analyte Properties Table for OM_1-18-2010_12-35-44.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

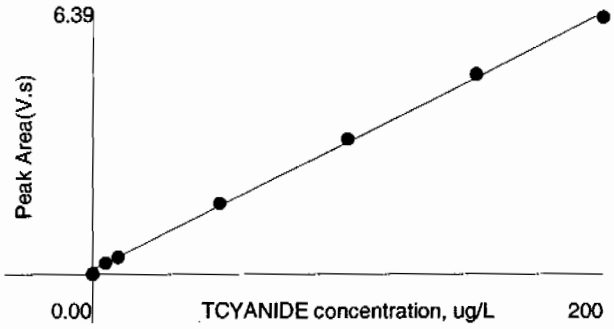


Author: axc2 Date : 1/19/2010

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.39	0.494	1.8	1/18/2010	12:40:06
2	150	1	4.99	0.384	-1.7	1/18/2010	12:40:58
3	100	1	3.39	0.261	-2.5	1/18/2010	12:41:50
4	50.0	1	1.78	0.137	-3.8	1/18/2010	12:42:43
5	10.0	1	0.425	0.0315	2.3	1/18/2010	12:43:37
6	5.00	1	0.276	0.0199	-0.6	1/18/2010	12:44:30
7	0.00	1	0.0116	3.98e-4		1/18/2010	12:45:24

Figure 1: TCYANIDE



Area = 0.0320 * Conc + 0.115
Conc = 31.2 * Area - 3.50
Correlation Coefficient (r) = 0.99944

No Weighting